The UNESCO Courier

A window open on the world

February 1971 (24th year) - Price: 50 cents

TV the new tom-tom

... but what is the message ?

KUM

Photo Paolo Koch © Photo Researchers, New York

The serenity of meditation

This gilt-bronze figure, the epitome of meditative serenity, depicts Avalokiteshvara, a Buddhist bodhisattva (a future Buddha, or one whose essence is enlightenment). It dates from the Silla Period in Korea (early 7th century A.D.). It is 90 cm high and is now in the Duksoo Palace Museum at Seoul (Republic of Korea). Bodhisattvas are revered as the ideal of compassion and salvation. Avalokiteshvara, whose cult dates back to the 2nd century, is one of the most popular in Asia. Bearer of the lotus, symbol of enlightenment, Avalokiteshvara is both a male and a female deity. In China, Korea and Japan, this bodhisattva is especially worshipped in the female form.

TREASURES
OF
WORLD ART

52 *Korea*

The UNESCO Courier

FEBRUARY 1971
24TH YEAR

PUBLISHED IN 13 EDITIONS

English	Japanese
French	Italian
Spanish	Hindi
Russian	Tamil
German	Hebrew
Arabic	Persian
U.S.A.	

Published monthly by UNESCO

The United Nations Educational, Scientific and Cultural Organization

Sales and Distribution Offices
Unesco, Place de Fontenoy, Paris-7•

Annual subscription (any edition) : $5.00
Single copies : 50 cents

The **UNESCO COURIER** is published monthly, except in August and September when it is bi-monthly (11 issues a year) in English, French, Spanish, Russian, German, Arabic, Japanese, Italian, Hindi, Tamil, Hebrew and Persian. Sales and distribution: UNESCO Publications Center, U. S. A., P. O. Box 433, New York, N. Y.,10016, MU 6-4707 (sole distributors of the U.S.A. edition).

Individual articles and photographs not copyrighted may be reprinted providing the credit line reads "Reprinted from the **UNESCO COURIER**" plus date of issue, and three voucher copies are sent to the editor. Signed articles reprinted must bear author's name. Non-copyright photos will be supplied on request. Unsolicited manuscripts cannot be returned unless accompanied by an international reply coupon covering postage. Signed articles express the opinions of the authors and do not necessarily represent the opinions of UNESCO or those of the editors of the **UNESCO COURIER.**

The Unesco Courier is indexed monthly in the Readers' Guide to Periodical Literature and in Current Contents - Education, Philadelphia.

★

Editorial Offices
Unesco, Place de Fontenoy, Paris 7e, France

Editor-in-Chief
Sandy Koffler

Assistant Editor-in-Chief
René Caloz

Assistant to the Editor-in-Chief
Lucio Attinelli

Managing Editors
English Edition : Ronald Fenton (Paris)
French Edition : Jane Albert Hesse (Paris)
Spanish Edition : Francisco Fernández-Santos (Paris)
Russian Edition : Georgi Stetsenko (Paris)
German Edition : Hans Rieben (Berne)
Arabic Edition : Abdel Moneim El Sawi (Cairo)
Japanese Edition : Hitoshi Taniguchi (Tokyo)
Italian Edition : Maria Remiddi (Rome)
Hindi Edition : Kartar Singh Duggal (Delhi)
Tamil Edition : T.P. Meenakshi Sundaran (Madras)
Hebrew Edition : Alexander Peli (Jerusalem)
Persian Edition : Fereydoun Ardalan (Teheran)

Assistant Editors
English Edition: Howard Brabyn
French Edition : Nino Frank
Spanish Edition : Jorge Enrique Adoum

Photo Editor : Olga Rödel

Layout and Design : Robert Jacquemin

All correspondence should be addressed to the Editor-in-Chief in Paris

Nº 2 - 1971 MC 71-2-263 A

Page	
4	**TV's CHALLENGE OF THE 70s: QUANTITY PLUS QUALITY** *By Martin Esslin*
8	**AMERICAN TV's 'OPEN SESAME' TO EDUCATION** A children's TV series now seen in 50 countries
12	**UNESCO IN THE SECOND DEVELOPMENT DECADE** *By Howard Brabyn*
14	**WORLD BOOM IN TV AND PUBLISHING** Unesco Statistical Yearbook reports
17	**LIFELINES FOR THE DEVELOPING WORLD** New highway systems across the continents *By W.H. Owens*
22	**THE WILL TO PEACE** *Message of His Holiness Pope Paul VI*
25	**ON CYCLONES AND OTHER DISASTERS — REFLECTIONS OF A GEOPHYSICIST** *By E.M. Fournier d'Albe*
28	**LATENT TALENT: THE ANAGRAM A PARENT CAN SOLVE** *By Boris Nikitin*
33	**UNESCO NEWSROOM**
34	**LETTERS TO THE EDITOR**
2	**TREASURES OF WORLD ART** The serenity of meditation (Korea)

Cover

Television, the new "tom-tom", has been called "a world where the real and make-believe tend to blur together and where the ultimate judgement—was this or that good or bad television?—is made on the basis of entertainment values". Can television reconcile its role as a medium of relaxation and entertainment with that of a source of information and education? Is it, in fact, meeting the challenge to provide quantity *plus* quality? These crucial questions are discussed in the article on page 4.

Photo Bebout © Rapho, Paris

XUM

TV receivers galore set a perplexing problem of choice for shoppers in a section of Tokyo that specializes in the sale of television sets and other electrical equipment and home appliances. Japan has over 21 million television receivers (one for every five persons) and over 2,600 transmitters.

Photos © Paul Almasy, Paris

TV

The challenge of the 70s

+ QUANTITY QUALITY

by Martin Esslin

TELEVISION is the mass medium par excellence. Never in the whole of human history have the products which television diffuses—news, views, entertainments, drama, human personality—been ingested in such enormous quantities by such large masses of human beings.

In Great Britain—the first country

MARTIN ESSLIN *is head of Drama (Radio) for the British Broadcasting Corporation. A member of the Arts Council of Great Britain and script adviser to the Royal Shakespeare Company, he has written extensively on modern theatre and contemporary playwrights. He is the author of "Brecht, a Choice of Evils" (1959), "The Theatre of the Absurd" (1962), "Harold Pinter" (1967), and "The Genius of the German Theatre" (1968), and is the editor of "Beckett" a volume of critical essays (1965). The present text is based on a study by Mr. Esslin published in Unesco's science quarterly, "Impact of Science on Society" (Vol. XX, No. 3). July-Sept., 1970.*

in the world to introduce (in 1936) a regular television service and thus one of the most highly developed television areas in the world—the average viewing audience lies between one-quarter and one-third of the total population. In the peak viewing hours in the evening, it can reach between 40 and 50 per cent of Britain's population.

It can well happen that one of the most popular programmes will be watched by more than one-third of the total population—an audience of 16 to 17 million people for a single play, light entertainment show, or serial.

These figures must be viewed in relation to the sizes of audiences for a single event or artistic presentation in pre-mass media epochs: one hundred thousand spectators for a football match, or, assuming a theatre of a capacity of a thousand spectators giving eight performances a week, about one million spectators for a play that runs for more than two years to packed houses.

A single popular television play in Britain thus reaches an audience which corresponds to a run of more than thirty years in a theatre! And this happens not just exceptionally, but almost every day, and sometimes even several times in the same evening!

In times past, another person's thoughts were one of the greatest of mysteries. Today, during television peak hours in one of the more highly developed countries, the contents of a very high proportion of other people's minds have become highly predictable.

Indeed, if we regard the continuous stream of thought and emotion which constitutes a human being's conscious mental processes as the most private sphere of his individuality, we might express the effect of this mass communications medium by saying that for a given number of hours a day, twentieth-century man switches his mind from private to collective consciousness. It is a staggering and, in the literal sense of the word, awful thought.

The above considerations are based on figures for television viewing in Britain, where more than 95 per cent of all households possess a television set. While other countries may not yet have reached this state of saturation, the likelihood that they eventually will is extremely high, almost to the point of certainty.

Three different channels are available in Britain; in many countries there are fewer; in some, like the United States, where up to ten or more different channels may be available to viewers in the bigger metropolitan areas, there are more. Television in the United States is operated by private enterprise and supported by advertising, in contrast to most countries, where it is a public monopoly operated by an agency of the government.

Taking the United States as an example, it would then appear that commercial television, offering more

CONTINUED NEXT PAGE

Putting the vision in 'telly'

channels, provides the viewer with much more variety. Paradoxically, this is not the case.

The availability of more channels in a ccmmercially operated system, like the American one, seems rather to restrict than to increase the choice for the viewer. This is true because market research is extensively used to determine what kind of programme tends to appeal to the maximum number of viewers at a given time.

As a result, there tend to be the same kinds of programmes on all the channels—situation-comedy series next to other situation-comedy series, Western against Western, football (American variety) against football. This tends to result in even greater uniformity in the type and level of material offered than in the British or German systems where at least two of the three channels are planned to provide genuine alternatives: serious against light material, arts against sports, intellectually demanding against popular fare.

Seen in such terms—millions of viewers hooked into the same stream of consciousness at a given moment—the quantitative aspect of the cultural revolution which the advent of television constitutes seems staggering enough. Yet, it might be argued, there is another, and even more staggering, even more revolutionary aspect to the matter. This, it seems to me, lies in the fact that the material of television—music-hall show or play or football game—is available *continuously* in an uninterrupted flow, on tap like piped water or electricity.

ADMITTEDLY, with the exception of the United States, the continuous stream of programmes does not yet, in most parts of the world, cover all the hours of the day and night. However, even in those countries where television hours are still restricted to afternoons and evenings, they cover the periods when most people are at leisure to switch on.

The main consequence of the continuous stream of material which television provides is that it juxtaposes, and tends to reduce to the same level in the consumer's mind, very different kinds and categories of viewing matter, different not only in the superficial qualitative sense that some of it is better, some worse, but in a far more basic regard. The viewer has come to see as *one kind of thing*—television programmes—what is in fact an amalgam of very heterogeneous material, in a far deeper qualitative sense.

One can arrange the material transmissible by television in a spectrum ranging from total reality at the one end to total irreality (fictitiousness) at the other. Thus, we can begin with events totally unrelated to any planning done by the television industry, e.g. news films of a war or a natural disaster.

Next are events that are still real, but foreseeable, so that they can be planned and in some degree pre-processed by the television producers, e.g. a coronation, a military parade, a sports event like the Olympic Games.

Then there is a range of events that are still real in the sense that they involve people in their real personalities, but are already structured and pre-planned as entertainment, e.g. parlour games in which members of the public answer questions to win prizes, or studio discussions between well-known personalities. And finally, at the other extreme end of the spectrum are the totally fictitious events: a play, a serial, a feature film.

The effect of the continuousness with which this material is presented for entertainment is that it tends to blur the qualitative distinctions between the different kinds of material. A scene from the fighting in Viet-Nam which shows real soldiers really dying may precede or follow a scene from a war play with actors simulating war; a politician trying to raise real issues on which the population is to make up its mind may precede or follow a comedian who is merely using his personality to amuse an audience.

What is significant is that to the audience as a whole, television is basically a medium of relaxation and entertainment. It is inevitable, therefore, that the distinctions between the real and the artificial tend to become blurred, at least subconsciously.

But the critical consequence of this is that, even by those who are quite clear in their minds as to what is reality and what is fiction, the ultimate qualitative judgement—was this good or bad television?—is made on the basis of entertainment values.

Thus it may well happen—indeed will happen almost inevitably—that the real soldiers really dying in Viet-Nam will be judged as either more or less moving, absorbing, entertaining than the actors in the war play, and the politician by whether his performance was as entertaining as that of the comedian.

No wonder that comedians and other television personalities become figures of national importance and influence on a par with politicians, that politicians are judged by the electorate on the basis of their abilities as comedians or television pundits.

The child who, on seeing the live television pictures of the first moon landing, remarked that he had seen more exciting television treatment of the same event in a science fiction serial a long time ago, highlighted a very real problem with, in the very long run, very alarming consequences.

For the events which happen unexpectedly and spontaneously, the most real events of all, are the ones which are most outside the control and planning of the television producer, and therefore tend to produce less good—in the sense of less entertaining, less skilful—television. The closer an event lies to the other end of the spectrum, the irrealistic end, the more manageable it becomes from the television producer's point of view.

ORGANIZERS of a demonstration who inform television news organizations beforehand that there will be violence which will provide good filmed news material are making use of the same basic problem of television. Because it is possible to film the event with a greater degree of planning and preparation it assumes far greater importance in the minds of the viewers as a piece of news than it may well deserve.

The French dramatist, Claude Ollier, highlighted this disturbing aspect of the mass media in a radio play in which the assassination of a head of State ultimately turned out to have been prearranged by a broadcasting organization in need of really gripping first-hand news reporting. Reports which from time to time appear about executions held up or even arranged for the benefit of television cameramen in an African civil war show that the satirist, in this case, was by no means exaggerating.

The increasing theatricalization of public life and politics, the selection of candidates by their faces' aptitude to take make-up, the conduct of election campaigns according to the televisual potential of issues rather than their real relevance—all these are ultimately a consequence of the medium's insatiable demand for entertainment material.

On the other hand, the positive, beneficial effects of the vast quantity of material on real, semi-real and pseudo-real events which television pours out must not be overlooked. By the very fact that politics and public affairs have become a branch of the entertainment industry they have been brought nearer to millions and millions of people who never previously gave them a thought.

The candidate for office may be

selected according to the same criteria by which a film star is promoted, but he will also have become as familiar a personality as a film star to vast masses of electors whose interest would have remained dormant in the pre-television age. And the sheer quantity of news films about an event like the war in Viet-Nam has, it can be very convincingly though never wholly conclusively argued, transformed American public opinion about it.

All this occurs at the most real end of the spectrum of television material. What of the middle ground of events involving real people but staged and stage-managed by television?

Whereas real events are hard to capture and plan for, the wholly fictional programme requires a very scarce commodity, writers and performers of outstanding ability, quite apart from being the most costly type of production because it needs long rehearsal, expensive sets, costumes, etc. On the other hand, the pseudo-event, such as the parlour game, the confrontation between interviewer and public personality, and a multitude of variations of the same pattern, is both plannable and relatively inexpensive to stage in terms of rehearsal time, sets, etc.

The greater the quantity of material a television system has to provide the larger will this element have to loom in its output.

From a cultural point of view this material is the least positive aspect of television. It is entertaining but little else. Neither information nor edification are conveyed by it. In addition, by exposing members of the public to the lure of large prizes it contains an element of manipulation, of the exploitation of greed and of the longing for notoriety, which make it less than just harmless amusement.

THE same applies to interview shows where one guest after the other is paraded before the audience, exposed to more or less searching questioning and then involved in general and fairly trivial conversation. Empty air time is here, literally, filled with vacuousness: the viewer switching off his consciousness and switching it on to material of this kind is replacing his own thoughts by a spiritual and intellectual vacuum.

None the less, in the search for material to fill empty spaces by foreseeable and plannable events, television has occasionally performed socially useful acts. Thus, in Britain, for example, a programme of the parlour-game type, in which archaeologists were

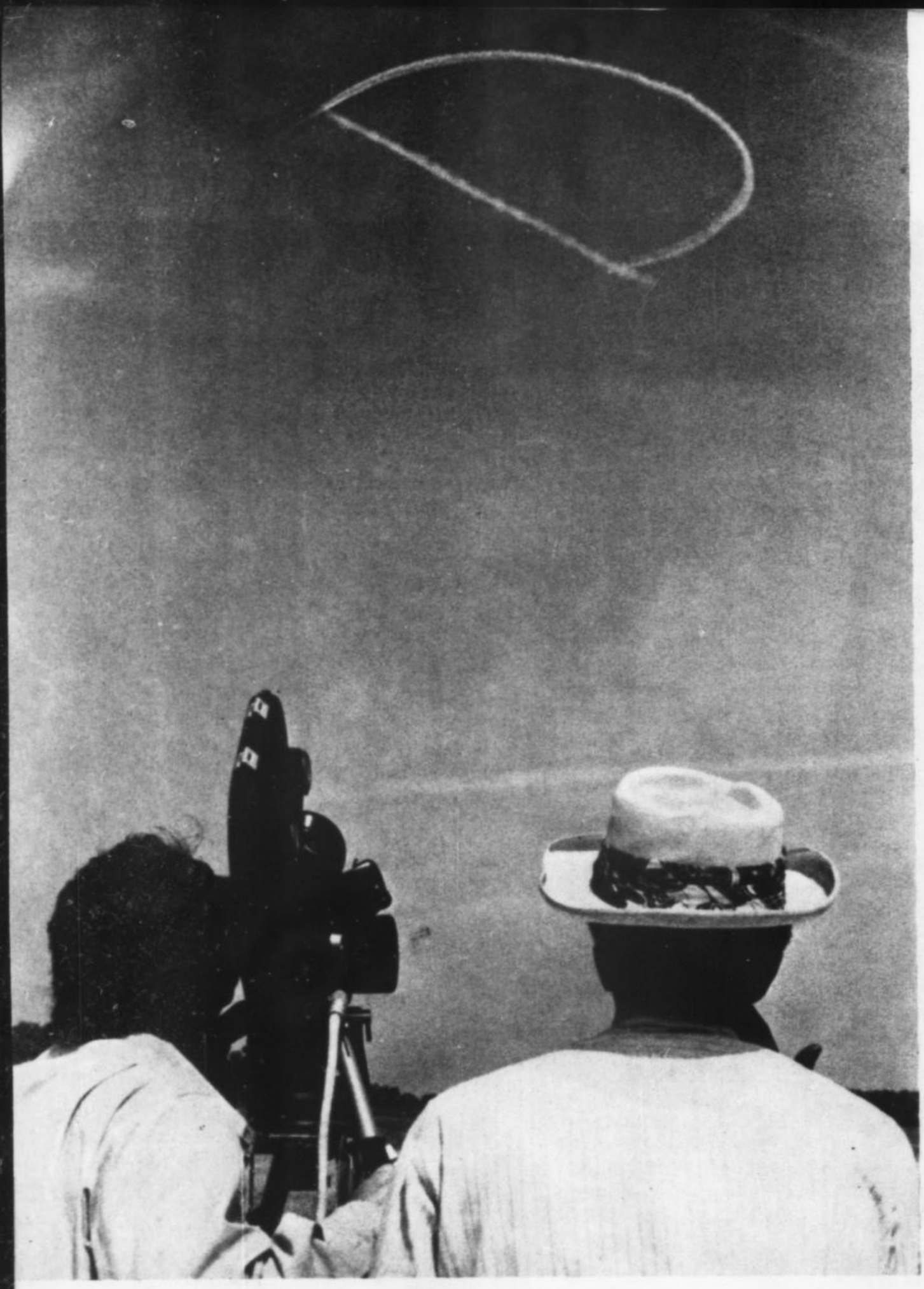
CONTINUED PAGE 10

Photo Charles W. Sanders © DPI, New York

Today's children have been called "the first generation to be raised by three parents", the "third parent" being the television set in the corner of the living room. Estimates from different countries indicate that the average child of elementary school and high school age (six to sixteen) devotes from 12 to 24 hours a week to television. In the U.S., it is estimated that a child of three is already averaging about 45 minutes a day on television—"the electronic baby sitter" in many homes.

XUM

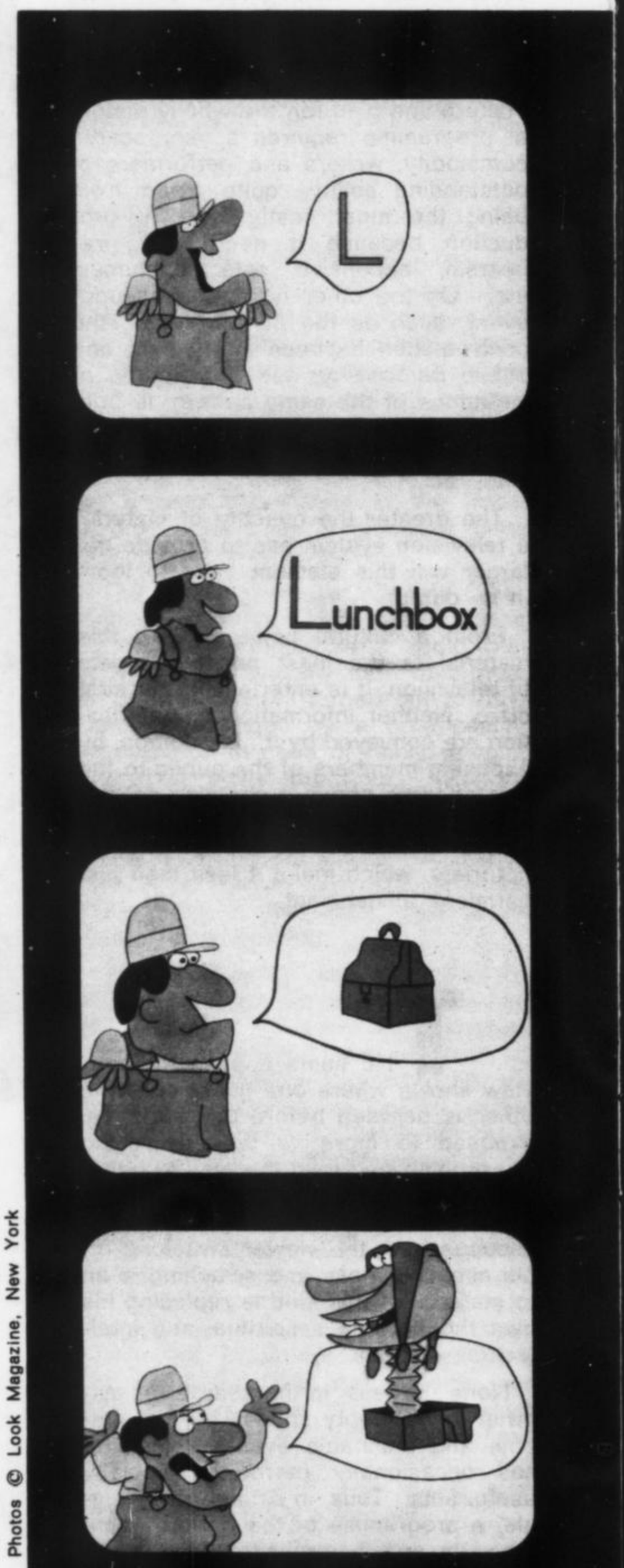
AMERICAN TV's 'OPEN SESAME' TO EDUCATION



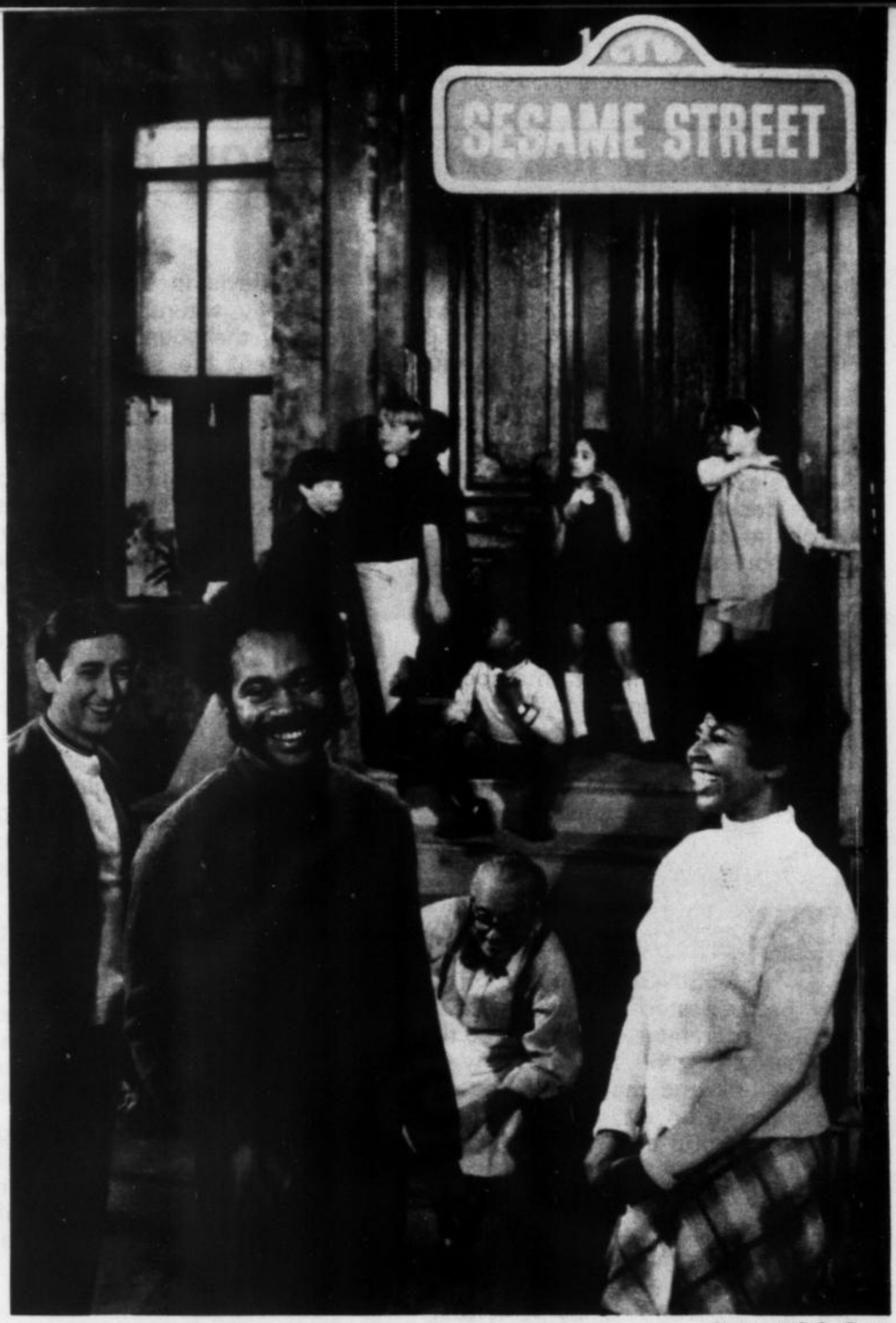
Above, camera team from "Sesame Street" films the letter D executed by a skywriting plane—one of the varied techniques used to prepare materials for lessons, so unobtrusive that children learn without realizing it. Puppets in the sweet shop (below) are teaching numbers as prices.

Photos USIS, Paris

Photos © Look Magazine, New York



To millions of children around the globe, the name "Sesame Street" has come to mean a fascinating world of fun, adventure—and learning with a chuckle. Hailed in the U.S.A. as the best children's show in TV history, it will this year be seen in some 50 countries by children—and grown-ups. This witty, fun-and-games programme began as an experiment on U.S. television in October 1969, with the help of grants totalling $8 million from the Carnegie Foundation, the Ford Foundation, the U.S. Office of Education and related government agencies. Within six months, 190 stations were carrying it to 6 million pre-school age children in the U.S.A. "Sesame Street" is different from the run-of-the-mill fare offered to junior TV viewers for two reasons. As opposed to the programmes filled with violence found in so many countries, it brings to children's TV a series of wit and humour, devoid of any violence, containing the positive message that no problem can be solved without co-operation. Secondly, it seeks to teach youngsters letters, numbers and simple counting skills, to stimulate their vocabulary and powers of reasoning and to open their eyes to the world at large. Despite its ad lib atmosphere, it is meticulously planned and uses well-proven and highly skilled TV techniques to bring home its lessons simply—and usually with a joke. Researchers testing children who have watched it have found that counting, reasoning and other skills have improved by two and a half times as compared with those of non-viewers. "Sesame Street" has been called "true international television" and has been a success in every country where it has been introduced. This year it is opening a "side street"—a programme aimed at children aged from seven to eleven.



Photos USIS, Paris

"Sesame Street" is set in an imaginary city neighbourhood (right) that gives the programme its name. On the street with its brownstone houses, stores and an alley, live the four chief participants in the programme. They are (photo above right) a married couple (in foreground), a teacher (seen on left) and a sweet shop proprietor (in apron, seated on steps).

Paid advertisements, called "commercials" are a common feature of American television. "Sesame Street" programmes include 15-second spoof "commercials" to "sell" the letters of the alphabet and numbers. Left, a cartoon character teaches the letter "L" (for lunchbox) and a surprise ending wraps the lesson in a joke. The "commercials" may tell young viewers "this programme has been brought to you by the Letter Y and the Number 3".

XUM

 (Continued from page 7)

TV: the new folk art of the 20th century?

asked to guess the origin, nature and age of objects supplied by museums, led to a vast expansion of interest in archaeology, a quickening of amateur exploration of the local past, and a rise in the sale of books dealing with the subject.

Any television programme can be seen as good or bad from the point of view of the consumer, whose primary test, a short-term one, is whether it is entertaining or boring.

To the detached observer considering the effects of television in the long-term context of its impact on a society or culture, a programme will be good if socially beneficial, bad if it tends, in the long run, to debase the cultural level of the society or to have harmful effects on its political health.

PASSING to the area of the wholly premeditated, planned type of television programme, which is also the area where the mass medium conveys artistic values and may itself become something like an art, the concept of quality appears in a third form. Good or bad here means artistically successful or unsuccessful.

It is by no means certain that the quality of a programme of this nature will be apparent to the viewer, who is above all preoccupied by entertainment value. The very profusion of quantity in television creates innumerable dilemmas of evaluation: the silliest parlour game may be infinitely more entertaining than an artistic masterpiece which—and here is the rub, and the measure of the dilemma—may in fifty years' time be appreciated as an immortal work.

Television's appetite for skills of artistic—or pseudo-artistic nature—is literally insatiable. Whereas, before the advent of television, a country's theatre demanded no more than, say, one hundred or two hundred new plays from its dramatists each year, today a country with three television channels may well present six or more dramatic programmes (plays, serials, comedies) each evening and thus demand something like two thousand new dramatic scripts a year, and this is a highly conservative estimate.

The same—remaining in the relatively restricted and therefore comparatively easily surveyable field of drama—applies to the performers.

Before the advent of this mass medium an actor who learned a new part could, if the play proved successful, count on appearing in it a hundred times or more in one theatre, and then afterwards touring in it to other parts of the country.

On television a single performance practically saturates the entire population of the country. The public cannot accept the same actor in a multitude of parts within a short span of time, so the demand for actors also has vastly increased.

How many playwrights, how many actors of outstanding talent can a country produce? How many does it need to provide enough material for a full television service? The supply of talent cannot be unlimited. So here quantity directly creates a problem of quality.

This point has major cultural consequences in the case of the smaller countries or language areas. A country of three or four million inhabitants may simply not possess enough actors or playwrights to provide even a fraction of the material that is demanded by television.

So the answer is found in the mass import of foreign material, dubbed or with subtitles, and this in the long run poses a serious threat to the cultural identity of the country concerned. One can say that the mass medium tends to create the large cultural unit.

In the case of large language areas, like those of the English and Spanish-speaking countries, this cultural effect is at least part of a process of organic change, even though some of its effects may be viewed with distaste by some of those affected.

In the case of smaller national cultures, however, the long-term effects may well be much more far-reaching. This is particularly the case in countries which are not only small in area but are bordered by powerful neighbours—like Switzerland, where German, French and Italian television can be received in considerable areas speaking the same language as the neighbouring larger unit.

IF the importing of television material is having such an impact on highly developed European countries, in the developing world, where television is often a prestige symbol of newly independent States, having neither a tradition of the skills required nor a reservoir of trained performers, these effects may be disastrously magnified—and surely will be in the near future.

It will require great insight and skill on the part of those in charge of television programming in these countries to avoid, or at least minimize, a really catastrophic development: the loss of their own cultural identities. Perhaps this can be done by judiciously mixing imports from very different areas and by concentrating on manifestations of the local culture which may be unspectacular—the local story-teller or folk-singer—but which are firmly based in the national tradition.

It would be wrong, however, to regard the effects of the mass demand for drama, situation comedy and spectacular musical and dance shows—at least in the larger culture areas—as wholly detrimental. A large demand stimulates talent. Indeed, throughout the history of art the highest achievements have always sprung from situations where many craftsmen or artists were engaged in satisfying a large demand: Rembrandt's artistic production was based on the widespread demand for portraits among the rich burghers of Holland which evoked a numerically strong guild of painters; Shakespeare and Marlowe, Calderón and Lope de Vega, Racine and Molière were the peaks of a broadly based culture which created a considerable demand for dramatists.

The same is true in the field of television of the artistic skills which spring directly from the production process. There can never have been as many highly skilled film directors and cameramen as we find today in countries like the United States, the United Kingdom, the Federal Republic of Germany or France.

The effects of this on related arts, such as the cinema, are obvious. Many of the best film-makers started their careers in television. And the cinema—it must perhaps be stressed—will in all likelihood emerge as the highest and most characteristic artistic achievement of our century when viewed from the vantage point of history.

The same is true of dramatists, at least in certain countries like the United Kingdom or the Federal Republic of Germany. The large demand for television drama is without doubt one of the reasons for the current flowering of dramatic talent in Britain.

In the United States, by contrast, the commercial nature of television has been detrimental to the development of drama: plays are too costly to produce relative to the size of the audience they can command, which in turn determines the advertising revenue. In many European countries the public-service concept behind the organization of the mass media has been able to counteract this tendency to make size of audience all-determining.

Precisely in the field of television drama, the quantitative demand has created certain characteristic forms which have their strong negative aspects side by side with some positive ones.

The dramatic series, in which the same set of characters reappears in self-contained episode after self-contained episode, is perhaps the most

characteristic feature of television. It is also one of the most formidable cultural phenomena of our time.

These series are undoubtedly among the most popular features of television in the major countries and the characters they create become mythological figures with their own lives and personalities which far transcend the relatively modest confines of their original raison d'être. They are the archetypes of twentieth-century man's collective consciousness and, perforce, also of his collective unconscious.

The series is the logical and inevitable outcome of television's vast hunger for material. It allows the same character, the same leading actor, and essentially the same story to be repeated week after week for months and years.

Such series are the sagas of the twentieth century. They correspond almost exactly to the stories which in primitive communities bards and ballad singers used to provide, always about nearly identical exploits of the tribal heroes. The western series in particular here provide an uncannily apt parallel.

THE mass demand which for the first time since man emerged from the primitive tribe enables every member of the community to have a say in the creation of its cultural material—whereas in every culture since antiquity, cultural creation always responded to the requirements of a small élite minority—and the annihilation of all physical distance through the electronic mass media (which Marshall McLuhan has rightly called the creation of the electronic village), have thus literally re-created something like the cultural situation of primitive man.

The chief can once again speak directly to his people and can be instantly recognized by every member of the community, and the whole community again shares in the exploits of the heroes: real—the soldiers at the war front one sees in the newsreel, or the wise television pundits who are the medicine men of our societies; or legendary—the neo-mythological figures of the fiction serials.

The analogy is complete, but does it reveal a situation which is frightening or which is reassuring? Neither, I think. For it has great positive as well as negative aspects: after all from primitive man's myths about heroes sprang such immortal works as the *Iliad* and the *Odyssey*.

Television is, or can at least become, the great folk art of modern

CONTINUED PAGE 32

Photo Georges Bourdelon © Productions du Dragon, Paris

Scanning the empty desert skies, this Telstar ground station brings programmes relayed by satellite to the television screens of Kuwait. The oil-rich island boasts 185 television sets per 1,000 of its 540,000 population (1968 figures). This compares with 294 per 1,000 for Canada, 280 for the United Kingdom, 185 for France, 158 for Italy, 106 for Argentina, 71 for Cuba, 13 for the United Arab Republic and 1 for Sudan.

Photo Dominique Roger - Unesco

ATILIO DELL'ORO MAINI, former Minister of National Education of Argentina, is President of the Unesco General Conference. He was elected at the last session of the Conference in November, 1970. The General Conference, which consists of representatives of Unesco's 125 Member States, is the sovereign body of this United Nations Agency and meets every two years to discuss and vote the organization's programme and budget. The General Conference elects the members of The Executive Board as well as the Director-General of the Unesco Secretariat.

PREM N. KIRPAL, former Permanent Secretary of the Ministry of Education of India, is President of the Unesco Executive Board. The Board consist of 34 members who supervise the execution of Unesco's programme and the administration of its budget between sessions of the General Conference. It usually meets several times each year.

Photo R. Lesage - Unesco

Unesco in the Second Development Decade

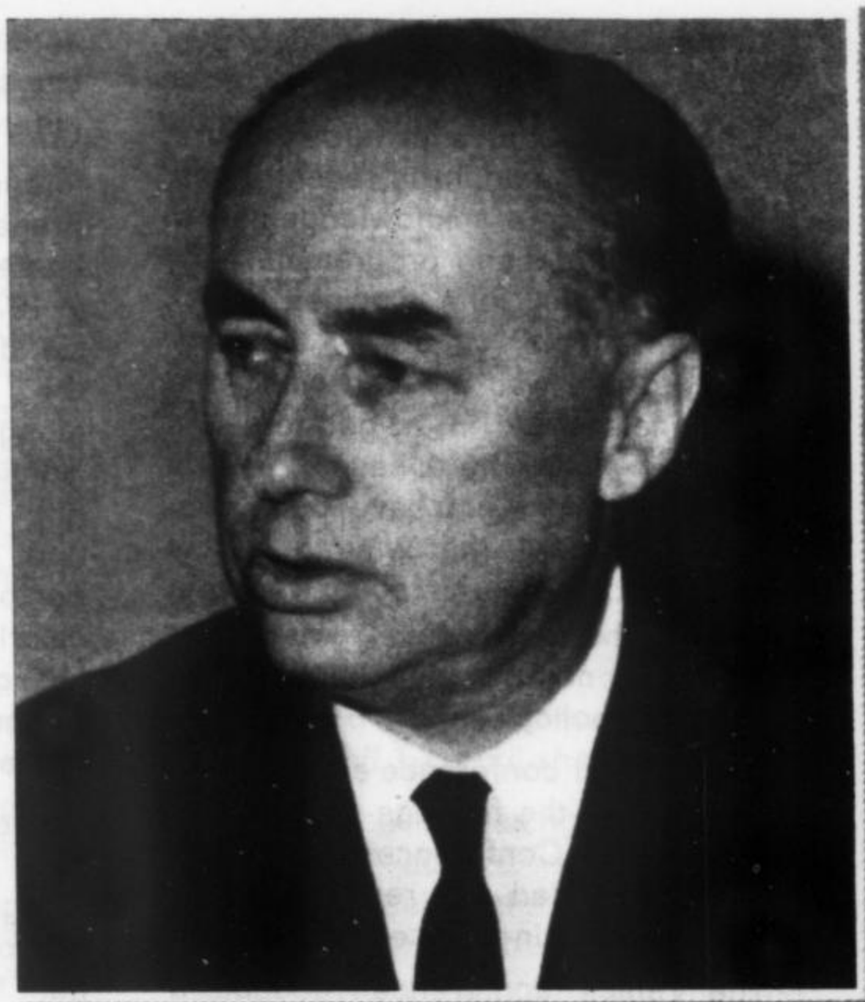
LIKE the last, reluctant leaves of autumn, the flags of 125 nations, which for five weeks had fluttered in the chill air of Paris, were hauled down on November 14, 1970, marking the end of Unesco's 16th General Conference.

But while the autumn winds were stripping the trees in preparation for the long winter months, a strong wind of change was whistling through the corridors and conference rooms of Unesco headquarters. For though Unesco has reached the ripe age of 25, the pace of its activities is quickening as the world enters the Second Development Decade.

Change was the keynote of the speech made by the Director-General of Unesco, Mr. René Maheu, introducing Unesco's Long-Term Outline Plan, itself an innovation of major significance, covering a span of five years. Recognition of the need for long-term planning underlines the growing scope and value of the tasks now being assumed by Unesco which can no longer be dealt with piecemeal on a two-yearly basis. Great aims require continuity as well as flexibility, and this is what the Outline Plan is intended to provide.

"I am profoundly convinced," said Mr. Maheu, "that Unesco's mission is essentially a cultural one and that its centre of gravity is destined, in a relatively distant future, to shift from education, where it is located at present, to science and then from science to culture, and that the social sciences will play a most important role in this process."

XUM



RENE MAHEU of France has been Director-General of Unesco since 1962 and is now in the middle of his second term of office. The Director-General is the chief executive of the Secretariat and is appointed for a six years term. He is responsible for the preparation and administration of the budget, the execution of the programme, and the recruitment and running of the Secretariat.

MALCOLM S. ADISESHIAH of India retired as Deputy Director-General of Unesco at the end of 1970 after completing 22 years service with the Secretariat. He is now Director of the Madras Institute of Development Studies.

JOHN E. FOBES of the United States assumed the duties of Deputy Director-General on January 1, 1971. Before joining Unesco in 1964 as Assistant Director-General in charge of Administration, Mr. Fobes had for many years been involved in the formulation and implementation of United States aid programmes and American policies in international organization affairs.

Photos Dominique Roger - Unesco

by
Howard Brabyn

The desire for change was reflected in the budget and programme which are voted every two years by the 125 Member States at the general conference. At a total of $89,898,560, the allocation for 1971-72 was 16.1 per cent higher than the previous two-year budget. An additional contribution towards Unesco's operational projects of $69,422,000 over the two-year period will come from the United Nations Development Programme.

The shift in emphasis towards science was seen in the planned participation of Unesco in the setting up of UNISIST—the United Nations Information System, Scientific and Technical—a prodigious undertaking destined to have far-reaching repercussions throughout the world. With a central fund of scientific and technical information available, the duplication of time-consuming and often tedious research will be avoided.

At present, scientific knowledge often remains locked up within countries by differences of language and method. Initially UNISIST aims to establish a common language of symbols that can be handled by computers. A start has been made with a basic set of 45 characters made up of Roman capitals, 10 digits and nine other characters. An inter-governmental conference is to be convened by Unesco this year to push this work ahead and to arrange for the training of scientists from the developing countries to enable them to work the system.

In the more distant future, UNISIST hopes, by encouraging standardization of norms used, to make an effective link-up between the various national scientific information systems as simple as making an intercontinental telephone call.

Information, or rather the lack of it, is one of the key factors preventing effective control of pollution of all kinds with all its concomitant dangers for the biosphere, the thin layer of air, water and land in which life on this planet exists.

Unesco has been one of the leaders in pointing out the dangers that exist for us if we go on increasing atmospheric pollution, if we release more and more oil into the oceans, if our consumption of energy continues to double every ten years. These dangers are now increasingly recognized, but there is still too wide a gap between awareness of the problem and positive action to deal with it.

With this in mind the Unesco general conference launched a long-term, inter-governmental programme—Man and the Biosphere. An international co-ordinating council, with representatives from 25 States, is to start work this year and the programme should

CONTINUED NEXT PAGE

be well under way by the time a United Nations conference on the human environment is held at Stockholm early in 1972.

The programme aims to develop ways of measuring changes in the environment, to establish comparable data, to arrange for exchange of information between existing monitoring systems and to attempt to achieve more accurate forecasting of future trends. In all these activities Unesco will be co-operating closely with other specialized United Nations Agencies such as the World Health Organization, the Food and Agriculture Organization and, of course, the United Nations itself.

Work carried out by Unesco in collaboration with the Inter-governmental Oceanic Commission is to be extended in a long-term plan for oceanic research and exploration and assistance given towards the establishment of the world monitoring system of automatic buoys known as IGOSS (Integrated Global Ocean Station System).

Changing attitudes towards culture, already widely evident in recent years, received concrete acknowledgement in Unesco's budget and programme. The English essayist John Cowper Powys once wrote that "culture is the bedrock, the final wall against which one leans one's back in a god-forsaken chaos." While the Unesco general conference might not have been prepared to go all the way with this assessment, it clearly recognized that culture and cultural development was a sine qua non for the whole fabric of Unesco policy.

The general conference enthusiastically endorsed the findings of the Intergovernmental Conference on Cultural Policies attended by representatives of 85 countries in Venice last summer.

The Venice conference recognized that if there was a human right to culture, the State had a corresponding obligation to provide access to it, and this obligation is underlined in Unesco's programme.

A regional inter-governmental conference on cultural policies is being prepared for Europe next year and conferences are scheduled for Asia in 1973 and Africa in 1975. What Venice did was to put culture back into the mainstream of development along with economic and social aims. Studies to be undertaken will deal not only with planning, legislation and cultural statistics, but with the democratization of culture and particularly with enlisting the mass media for cultural development. (See the "Unesco Courier" special issue of January 1971.)

The Unesco general conference took a very important step towards safeguarding our cultural heritage by approving the convention to halt illegal trafficking in cultural property through the institution of a "passport", without which items cannot legally be exported.

WORLD BOOM IN TELEVISION AND

READ any good books lately? Latest figures show plenty available—487,000 titles produced in 1968, a 70 per cent increase in 13 years.

The publishing boom coincided with a television boom. In 1968, 22 million more TV sets brought the world total to 236 million, nearly eight times as many as in 1953.

Depending on where you live, you might have cut back on your cinema-going to make time for all that reading and viewing. The average Briton went to the cinema only four times in 1968, once less than in 1967. His American cousin, with 9,800 movie houses and 3,600 drive-in cinemas to choose from, only managed to get to the cinema seven times in 1967. In 1968 the Bulgarian went twice as often, the citizen of the U.S.S.R. (where more than half the world's cinemas are located) went 20 times.

The champion cinema-goer is still, however, the citizen of Taiwan, who went 66 times in 1967. Regrettably there are no Taiwan figures for 1968: it would have been interesting to see if he continued to go once a week, and more often when there was something he did not want to miss.

These figures are taken at random from a yearbook—the Unesco Statistical Yearbook 1969 (1), which has just been published. Taken together they describe an exciting and unfair world.

Exciting, because this world is culturally expanding, with more books, more radio sets, more university students and a record consumption of paper for cultural purposes which has nearly tripled since the 1950s.

Unfair, because these cultural advances are concentrated on a minority of the 3,483,000,000 of us.

In the case of book production, Europe, which has only 13 per cent of the world's people, publishes more than 44 per cent of the titles. Africa, which has 10 per cent of the population, publishes only 1.6 per cent, while even Asia, with 55.9 per cent of the world's people, publishes only 20.5 per cent. North America produced 14.4 per cent in 1968, two points down on 1967, while the U.S.S.R. produced 15.6 per cent, one point up, although still not at its peak of 20.9 per cent in 1960.

Africans have few chances of cinema-going. People in Mauritius and dependencies get to the cinema nine times a year, those in the Spanish Sahara eight times, but most Africans are lucky if they see a film a year. Algeria had far and away the greatest number of cinemas at 322 but this only equals 13 seats per thousand, while Upper Volta has one seat per thousand, Mali and Burundi even less.

Daily newspaper reading is similarly concentrated. The Swedes read most, for although the number of papers is falling, circulation is rising to 518 per thousand. The Japanese have 492 copies per thousand, the British, who were world champions at 573 per thousand in 1954, have 463, Eastern Germany has 445, more than the Federal Republic of Germany which has 328. Norway, the Netherlands, New Zealand and the U.S.S.R. are in the 300s, a good number of European countries in the 200s.

Circulations become dramatically thinner elsewhere. Pakistan has 6 newspapers per thousand. Ceylon 44, Malaysia 75. In Africa, Mauritius and dependencies have 96 per thousand, Dahomey has less than one paper for every two thousand, Mali is little better at 0.6 per thousand. One bright spot: at the previous count 44 countries had no daily paper; now Botswana has started one.

There is a trend for developing countries to produce more

(1) **UNESCO STATISTICAL YEARBOOK 1969, Unesco, 7, Place Fontenoy, Paris (7e). $26, £7.80 stg., 104 F.**

Furthermore, international assistance is to be mobilized to safeguard the sites and monuments of Mohenjo Daro, in Pakistan, Philae, in the United Arab Republic, and Borobudur, in Indonesia. While the conference was in progress the Federal Republic of Germany announced a contribution of more than half a million dollars towards the rescue of Borobudur, the Netherlands one of $150,000, and Japan promised to launch a fund-raising campaign. The Indonesian government announced the allocation of one million dollars to the project.

Buildings and monuments are not the only aspects of culture that Unesco is helping to preserve. Work is to go ahead on the preparation for publication of a "General History of Africa", the collection and publication of African oral tradition and the promotion of African languages as a medium of culture and lifelong education.

In its discussion of the social sciences the general conference re-affirmed that all Unesco's activities have social consequences. Trying to act without reference to the social sciences is like trying to dock a liner without a pilot. The servicing of projects by social scientists is, in the words of Assistant Director-General Richard Hoggart, "more than mere intellectual plumbing," for it can affect the definition and operation of entire programmes.

The social science programme will concentrate on the development and promotion of human rights and peace. Population and environment problems will be studied and the results of an enquiry into trends in human science research will be published.

Despite the increasing emphasis on science and culture, education continues to receive the major portion of the Unesco budget. This is understandable in view of the fact that the world's population is growing bigger and growing younger. In western Samoa, for example, 51 per cent of the population is of school age, and Barbados is spending as much as 20 per cent of its national budget on education.

Experience in the developing countries has shown that the need is not merely for more and more education. In Dahomey, only 0.7 per cent of the children who entered first grade two years ago are likely to complete their full 13 years of schooling, while 50 per cent of the 37,000 enrolled will not even finish primary school. In Zambia there is a problem faced by many developing countries; 50,000 primary school leavers could not find secondary school places in 1969, and very few of them could find jobs either. The days are over, in Zambia and other African countries, when a certificate of education was a passport to good employment.

Over recent years, and particularly during International Education Year 1970, Unesco has been conducting a re-examination of the aims and methods

CONTINUED NEXT PAGE

BOOK TRANSLATION, Unesco Yearbook reports

films and the developed countries less. But even where patterns change, unfairness remains. After Japan, India produced more full-length films than any other country in 1968—at 350, close to the American rate in the early 1950s—but the average Indian only got to the cinema four times in the last year recorded.

The Yearbook does not contain the latest U.S.A. film production figures which were running at 215 in 1967, behind Italy's 254 in 1968, and not much ahead of Greece's 192, the U.S.S.R.'s 163, Hong Kong's 156 or Pakistan's 133. Only two African countries are recorded as producing any long films: the U.A.R. (54) and Algeria (3).

School enrolment figures are much more encouraging. In the year 1967 some 15 million more students were enrolled at the three levels of education, total enrolment being nearly 450 million. Of these over 320 million were at the first level, over 100 million at the second level and between 21 and 22 million were at the third level.

For the first time the Yearbook presents a series of enrolment figures adjusted to allow for the different national systems and the differing ages of the pupils in various countries, so as to permit real comparisons between countries. One striking comparison concerns the enrolment of girls, who, at under 200 million, still make up well under half the world total, and are still most disadvantaged in the developing countries. Whereas in North and South America 52 million of the 108 million enrolled are girls, in Asia only 62 million out of the 164 million students are girls. The percentage of girls enrolled in Africa, although steadily increasing, is the same as in Asia—about 38 per cent.

Progress shows in the distribution of radio sets. Although half the world's 674 million sets were in North America, the number per thousand went up fairly steadily. Morocco, which had 15 per thousand in 1950, had 57 in 1968, Kenya had 49, Gabon 104, the Seychelles 204. Even the lowest distribution rate in an independent African country—nine per thousand for Mali and Rwanda—was many times better than most countries' 20 years back. The lowest distribution rate recorded in South America was French Guyana's 82, the highest Argentina and Uruguay at 381. Asia's rates vary from Bahrein's 1,075 per 1,000 (four times Japan's score) to Bhutan's 4.

The sections on science and technology contain for the second time data on the use countries make of human resources—the deployment of scientists and engineers on research and experimental development (R & D), for example. Current expenditure for R & D compared with Gross National Product (G.N.P.) figures give a rough measure of the effort a country is making and certainly point the way forward. While the U.S.A. spent approximately 3.0 per cent of its G.N.P. in 1967 and other advanced countries between 1 and 2 per cent, most of the developing countries of Africa, Asia and Latin America spent less than 0.5 per cent.

There are some hopeful straws in the wind, however; a number of young countries have doubled and sometimes tripled their current expenditures for R & D over the past five years. Yet this effort remains relatively modest in comparison with the development tasks ahead for these countries.

An entirely new section deals with public expenditure on culture, giving an idea of differing cultural priorities. Botswana, having started a daily paper, spent most of its money on its press Radio and TV took the largest sums in Austria, Denmark, Hungary, Niger, Norway, Poland and the U.S.S.R. Nowhere do the fine arts rank top, and the theatre gets priority only in Czechoslovakia and the Federal Republic of Germany. ■

be well under way by the time a United Nations conference on the human environment is held at Stockholm early in 1972.

The programme aims to develop ways of measuring changes in the environment, to establish comparable data, to arrange for exchange of information between existing monitoring systems and to attempt to achieve more accurate forecasting of future trends. In all these activities Unesco will be co-operating closely with other specialized United Nations Agencies such as the World Health Organization, the Food and Agriculture Organization and, of course, the United Nations itself.

Work carried out by Unesco in collaboration with the Inter-governmental Oceanic Commission is to be extended in a long-term plan for oceanic research and exploration and assistance given towards the establishment of the world monitoring system of automatic buoys known as IGOSS (Integrated Global Ocean Station System).

Changing attitudes towards culture, already widely evident in recent years, received concrete acknowledgement in Unesco's budget and programme. The English essayist John Cowper Powys once wrote that "culture is the bedrock, the final wall against which one leans one's back in a god-forsaken chaos." While the Unesco general conference might not have been prepared to go all the way with this assessment, it clearly recognized that culture and cultural development was a sine qua non for the whole fabric of Unesco policy.

The general conference enthusiastically endorsed the findings of the Intergovernmental Conference on Cultural Policies attended by representatives of 85 countries in Venice last summer.

The Venice conference recognized that if there was a human right to culture, the State had a corresponding obligation to provide access to it, and this obligation is underlined in Unesco's programme.

A regional inter-governmental conference on cultural policies is being prepared for Europe next year and conferences are scheduled for Asia in 1973 and Africa in 1975. What Venice did was to put culture back into the mainstream of development along with economic and social aims. Studies to be undertaken will deal not only with planning, legislation and cultural statistics, but with the democratization of culture and particularly with enlisting the mass media for cultural development. (See the "Unesco Courier" special issue of January 1971.)

The Unesco general conference took a very important step towards safeguarding our cultural heritage by approving the convention to halt illegal trafficking in cultural property through the institution of a "passport", without which items cannot legally be exported.

WORLD BOOM IN TELEVISION AND

READ any good books lately? Latest figures show plenty available—487,000 titles produced in 1968, a 70 per cent increase in 13 years.

The publishing boom coincided with a television boom. In 1968, 22 million more TV sets brought the world total to 236 million, nearly eight times as many as in 1953.

Depending on where you live, you might have cut back on your cinema-going to make time for all that reading and viewing. The average Briton went to the cinema only four times in 1968, once less than in 1967. His American cousin, with 9,800 movie houses and 3,600 drive-in cinemas to choose from, only managed to get to the cinema seven times in 1967. In 1968 the Bulgarian went twice as often, the citizen of the U.S.S.R. (where more than half the world's cinemas are located) went 20 times.

The champion cinema-goer is still, however, the citizen of Taiwan, who went 66 times in 1967. Regrettably there are no Taiwan figures for 1968: it would have been interesting to see if he continued to go once a week, and more often when there was something he did not want to miss.

These figures are taken at random from a yearbook—the Unesco Statistical Yearbook 1969 (1), which has just been published. Taken together they describe an exciting and unfair world.

Exciting, because this world is culturally expanding, with more books, more radio sets, more university students and a record consumption of paper for cultural purposes which has nearly tripled since the 1950s.

Unfair, because these cultural advances are concentrated on a minority of the 3,483,000,000 of us.

In the case of book production, Europe, which has only 13 per cent of the world's people, publishes more than 44 per cent of the titles. Africa, which has 10 per cent of the population, publishes only 1.6 per cent, while even Asia, with 55.9 per cent of the world's people, publishes only 20.5 per cent. North America produced 14.4 per cent in 1968, two points down on 1967, while the U.S.S.R. produced 15.6 per cent, one point up, although still not at its peak of 20.9 per cent in 1960.

Africans have few chances of cinema-going. People in Mauritius and dependencies get to the cinema nine times a year, those in the Spanish Sahara eight times, but most Africans are lucky if they see a film a year. Algeria had far and away the greatest number of cinemas at 322 but this only equals 13 seats per thousand, while Upper Volta has one seat per thousand, Mali and Burundi even less.

Daily newspaper reading is similarly concentrated. The Swedes read most, for although the number of papers is falling, circulation is rising to 518 per thousand. The Japanese have 492 copies per thousand, the British, who were world champions at 573 per thousand in 1954, have 463, Eastern Germany has 445, more than the Federal Republic of Germany which has 328. Norway, the Netherlands, New Zealand and the U.S.S.R. are in the 300s, a good number of European countries in the 200s.

Circulations become dramatically thinner elsewhere. Pakistan has 6 newspapers per thousand. Ceylon 44, Malaysia 75. In Africa, Mauritius and dependencies have 96 per thousand, Dahomey has less than one paper for every two thousand, Mali is little better at 0.6 per thousand. One bright spot: at the previous count 44 countries had no daily paper; now Botswana has started one.

There is a trend for developing countries to produce more

(1) UNESCO STATISTICAL YEARBOOK 1969, Unesco, 7, Place Fontenoy, Paris (7e). $26, £7.80 stg., 104 F.

Furthermore, international assistance is to be mobilized to safeguard the sites and monuments of Mohenjo Daro, in Pakistan, Philae, in the United Arab Republic, and Borobudur, in Indonesia. While the conference was in progress the Federal Republic of Germany announced a contribution of more than half a million dollars towards the rescue of Borobudur, the Netherlands one of $150,000, and Japan promised to launch a fund-raising campaign. The Indonesian government announced the allocation of one million dollars to the project.

Buildings and monuments are not the only aspects of culture that Unesco is helping to preserve. Work is to go ahead on the preparation for publication of a "General History of Africa", the collection and publication of African oral tradition and the promotion of African languages as a medium of culture and lifelong education.

In its discussion of the social sciences the general conference re-affirmed that all Unesco's activities have social consequences. Trying to act without reference to the social sciences is like trying to dock a liner without a pilot. The servicing of projects by social scientists is, in the words of Assistant Director-General Richard Hoggart, "more than mere intellectual plumbing," for it can affect the definition and operation of entire programmes.

The social science programme will concentrate on the development and promotion of human rights and peace. Population and environment problems will be studied and the results of an enquiry into trends in human science research will be published.

Despite the increasing emphasis on science and culture, education continues to receive the major portion of the Unesco budget. This is understandable in view of the fact that the world's population is growing bigger and growing younger. In western Samoa, for example, 51 per cent of the population is of school age, and Barbados is spending as much as 20 per cent of its national budget on education.

Experience in the developing countries has shown that the need is not merely for more and more education. In Dahomey, only 0.7 per cent of the children who entered first grade two years ago are likely to complete their full 13 years of schooling, while 50 per cent of the 37,000 enrolled will not even finish primary school. In Zambia there is a problem faced by many developing countries; 50,000 primary school leavers could not find secondary school places in 1969, and very few of them could find jobs either. The days are over, in Zambia and other African countries, when a certificate of education was a passport to good employment.

Over recent years, and particularly during International Education Year 1970, Unesco has been conducting a re-examination of the aims and methods

CONTINUED NEXT PAGE

BOOK TRANSLATION, Unesco Yearbook reports

films and the developed countries less. But even where patterns change, unfairness remains. After Japan, India produced more full-length films than any other country in 1968—at 350, close to the American rate in the early 1950s—but the average Indian only got to the cinema four times in the last year recorded.

The Yearbook does not contain the latest U.S.A. film production figures which were running at 215 in 1967, behind Italy's 254 in 1968, and not much ahead of Greece's 192, the U.S.S.R.'s 163, Hong Kong's 156 or Pakistan's 133. Only two African countries are recorded as producing any long films: the U.A.R. (54) and Algeria (3).

School enrolment figures are much more encouraging. In the year 1967 some 15 million more students were enrolled at the three levels of education, total enrolment being nearly 450 million. Of these over 320 million were at the first level, over 100 million at the second level and between 21 and 22 million were at the third level.

For the first time the Yearbook presents a series of enrolment figures adjusted to allow for the different national systems and the differing ages of the pupils in various countries, so as to permit real comparisons between countries. One striking comparison concerns the enrolment of girls, who, at under 200 million, still make up well under half the world total, and are still most disadvantaged in the developing countries. Whereas in North and South America 52 million of the 108 million enrolled are girls, in Asia only 62 million out of the 164 million students are girls. The percentage of girls enrolled in Africa, although steadily increasing, is the same as in Asia—about 38 per cent.

Progress shows in the distribution of radio sets. Although half the world's 674 million sets were in North America, the number per thousand went up fairly steadily. Morocco, which had 15 per thousand in 1950, had 57 in 1968, Kenya had 49, Gabon 104, the Seychelles 204. Even the lowest distribution rate in an independent African country—nine per thousand for Mali and Rwanda—was many times better than most countries' 20 years back. The lowest distribution rate recorded in South America was French Guyana's 82, the highest Argentina and Uruguay at 381. Asia's rates vary from Bahrein's 1,075 per 1,000 (four times Japan's score) to Bhutan's 4.

The sections on science and technology contain for the second time data on the use countries make of human resources—the deployment of scientists and engineers on research and experimental development (R & D), for example. Current expenditure for R & D compared with Gross National Product (G.N.P.) figures give a rough measure of the effort a country is making and certainly point the way forward. While the U.S.A. spent approximately 3.0 per cent of its G.N.P. in 1967 and other advanced countries between 1 and 2 per cent, most of the developing countries of Africa, Asia and Latin America spent less than 0.5 per cent.

There are some hopeful straws in the wind, however; a number of young countries have doubled and sometimes tripled their current expenditures for R & D over the past five years. Yet this effort remains relatively modest in comparison with the development tasks ahead for these countries.

An entirely new section deals with public expenditure on culture, giving an idea of differing cultural priorities. Botswana, having started a daily paper, spent most of its money on its press Radio and TV took the largest sums in Austria, Denmark, Hungary, Niger, Norway, Poland and the U.S.S.R. Nowhere do the fine arts rank top, and the theatre gets priority only in Czechoslovakia and the Federal Republic of Germany. ■

The recognition of Man's rights and human dignity

of education. This process is to continue with special emphasis on education for all and lifelong education. Problems of women's access to education and the special needs of the handicapped will receive particular attention.

Ministers of education are to attend regional conferences to be organized by Unesco in Asia in 1971, in Latin America in 1972, and in Europe in 1973. A commission of international experts has been set up to study plans for developing educational systems region by region and a report which will help developing countries in their planning will be ready this summer. Another commission starts work this year and will advise developing countries how to make the best use of training schemes available abroad to provide the skills needed at home.

In a new departure, Unesco is to send out "flying squads" of experts to help Member States with the planning of curricula. One of the big problems of today is how to adapt the school curriculum to keep pace with rapid technological change. In some cases curricula have become irrelevant; in others, particularly in former colonies, the "imported" curricula never were relevant.

Not so long ago Jane Austen's studies of upper middle-class life in 19th century England were still required reading for African boys who wanted to get ahead, whilst their own countries' social problems were totally ignored; in predominantly agricultural countries agricultural problems were omitted from school programmes in which long hours were devoted to the study of the European Industrial Revolution.

DESPITE determined efforts over the years, literacy remains one of the world's major problems. Although the percentage of illiterates is dropping, the total number of illiterates keeps on rising.

Unesco's Experimental World Literacy Programme is to be continued in 12 large scale projects in countries ranging from Ecuador to Tanzania. The Indian government, for example, aims to halve its illiterate population of 115 million within the next ten years. Included in the world literacy programme will be a number of projects to encourage young people to participate in economic and social development.

The very latest technological weapons are to be used in this continuing battle. This year Unesco specialists are to examine the possible uses of computers in education; long-term studies on the use of telecommunication satellites in education will include experiments to see how far culturally linked areas, such as French-speaking Africa, can make use of regional programmes thus reducing the per capita costs; a major project based on Santiago is under way in which twenty experts are studying the feasibility of a regional satellite education system for Latin America; $200.000 is being spent on assistance to the Latin American Institute for Educational Communications which carries out research into the use of mass media for education, trains personnel and sends out mobile teams of experts to help national activities.

The growing part played by the mass media in plans for education is typical of the trend towards interdisciplinary action in Unesco's programme. Unesco's Communications Sector no longer restricts itself to the training of journalists and television men or the promotion of book production and distribution, important as these things are. American children now spend more time in front of their television screens than they do behind their desks, so television is already playing a vital part in their education. Unesco's communications programme recognizes this interaction and tries to harness it.

The general conference also recognized the inherent dangers of these powerful new media. A draft declaration of guiding principles on the uses of telecommunication satellites is being drawn up to counter the evident risks involved when a few countries will soon be in a position to impose their cultural, educational and political standards on large sections of the world.

While attention is focussed on the new possibilities of sophisticated modern media in education, one of the most exciting items in the programme has to do with the oldest form of mass communication—the book. By acclamation the general conference designated 1972 as International Book Year, and Unesco is to launch a programme to make what is still the cheapest, handiest (you cannot turn back the pages of a television broadcast) and the most effective means of mass communication available to more people.

Although there are now twice as many readers as twenty years ago, the book is still a rarity in too many parts of the world. International Book Year will encourage writing and translation, production and distribution as well as the reading habit, which needs a boost both in those countries where books are rare and in those in which television consumes an increasing share of leisure time.

Unesco has already set up book development centres in Karachi and Bogota and is to establish a copyright information centre to help developing countries to get greater access to those protected works which they need to fill the gaps in their own production.

THE dominating theme of Unesco's 16th General Conference can be summed up in the one word "Development". The urgent need to help the developing countries to throw off the indignities of the past and develop their enormous potentialities was at the core of almost every discussion and every decision.

Addressing the delegates at the Plenary Session, the President of the general conference, Mr. Atilio dell'Oro Maini, former Minister of National Education in Argentina, declared:

"The Second Development Decade will give Unesco the opportunity of increasing its aid to Member States. Unesco is largely responsible for the recognition of the fact that man is at once the source, the agent and the beneficiary of a development which should be of benefit to the whole community. Development is not merely economic growth, nor the purely material expansion of a consumer society. It is also, above all, the raising up of man and the recognition of his rights and dignity."

Standing on the threshhold of the Second Development Decade, Unesco has set itself a new pattern of continuity with change; building on the achievements of twenty-five years it is preparing to meet the new challenge with new ideas. ■

Lifelines for the developing world

by W. H. Owens

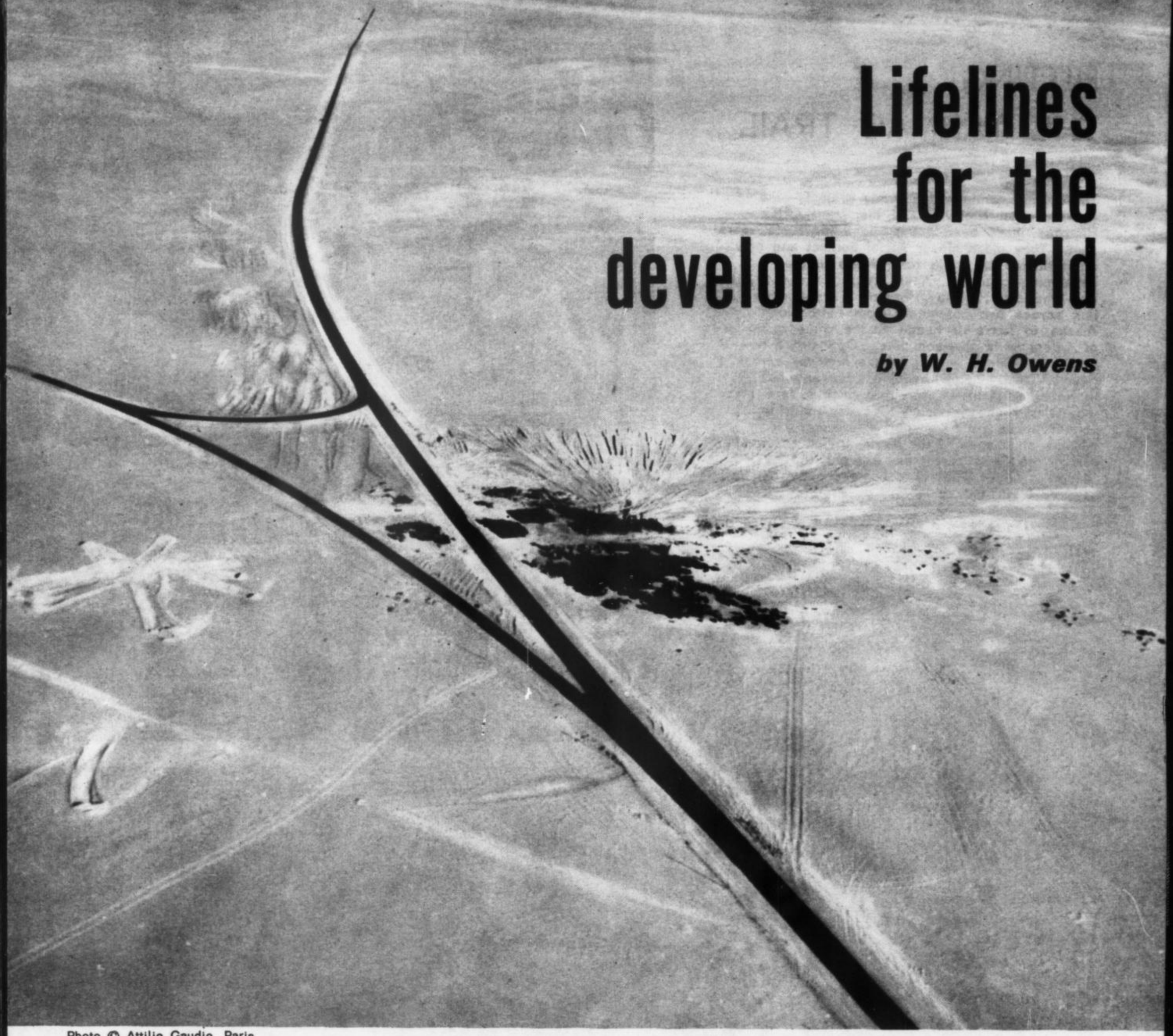


Photo © Attilio Gaudio, Paris

Metalled highways snake across the barren emptiness of the Algerian Sahara along the route of the old camel trails. Above, the junction of the fine new roads connecting Ouargla, Ghardaia and El-Golea, some 500 kilometres south of Algiers.

MOST of the world's people live in villages with only primitive means of transport. The lack of modern communications deprives them of trade and social contacts with neighbouring communities. Across vast areas of continents the only roads fit to carry today's motor traffic link the main towns and cities; even these are not always hard surfaced throughout, and stretches may become impassable in the rainy seasons.

But great efforts are now being made in the developing nations of Asia, Africa and Latin America to provide and maintain the roads needed to advance their economies and improve the living standards of millions of people. Too poor as yet to finance their own highway programmes, these countries are assisted on a growing scale by international agencies like the World Bank and its affiliated International Development Association, the Inter-American Bank and the United Nations Development Programme.

In past years, financial aid for highways in the developing countries has been put mainly to large scale projects. Now, increasing funds are being allocated each year to village access roads and the farm-to-market roads which directly benefit the greatest numbers of people.

Due to the lack of transportation facilities, areas with an excess of food often exist in close proximity to famine stricken areas. In west Africa, as elsewhere, foodstuffs have had to lie and rot on farms because there were no means available of distributing them to needy communities not so very far away.

The trend towards rural road improvement is reflected in recent lending by the international banks. For example, the Inter-American Development Bank is currently assisting Mexico to

CONTINUED PAGE 20

W. H. OWENS *is a British journalist who has specialized in questions of economic development and the exploitation of natural resources.*

HITTING THE TARMAC TRAIL

Three great continental highway projects—the Pan-American Highway and the Trans-Africa Highway—have been going ahead for some years past. They mean closer social contact and new opportunities for trade for millions in the developing countries. Apart from one section, the Pan-American Highway, forming a continuous link across two continents from Fairbanks, Alaska, to Tierra de Fuego on the southern tip of Argentina, is now complete. Opposite, a new bridge carrying a section of the highway across a river in Chile. Below, building a feeder road in Kabul, Afghanistan, through which a section of the Asian Highway passes. Feeder roads to connect these great transport arteries to the millions of villages of the world are an essential part of the development plan. Right, the Bus Station in Lagos, Nigeria, a nerve centre of trade between town and village.

Photo © Marc Riboud - Magnum, New York

Photo © Paul Almasy, Paris

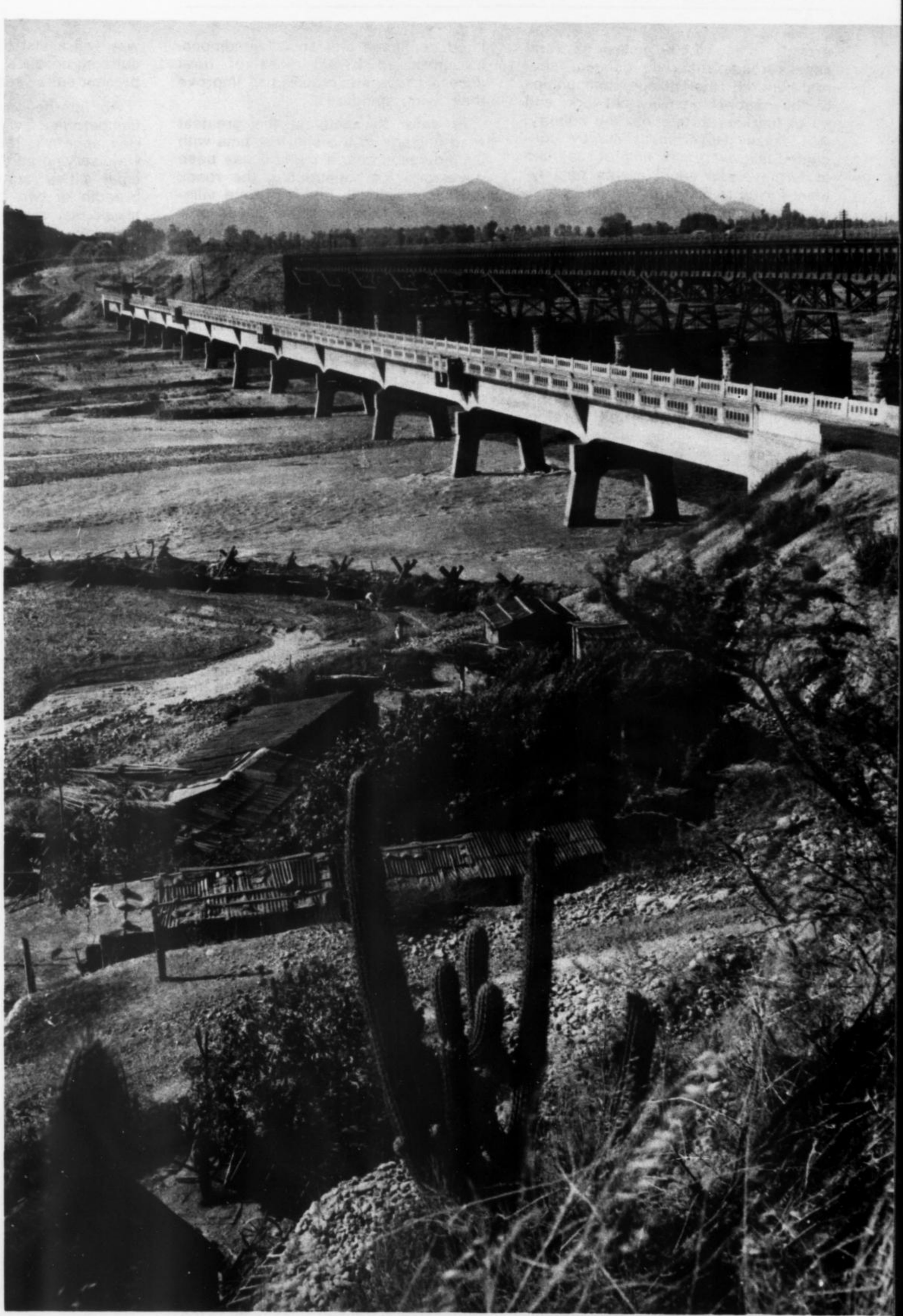


Photo © Paul Almasy, Paris

The 3,500 ft. Bosporus Bridge—tomorrow's direct road link between Europe and Asia

provide some 1,500 miles of rural access roads that will connect several hundred small village communities to the national highway network, and so to markets throughout the country. A Mexican Government survey concluded that every new mile of road laid in fertile areas could create employment for up to 500 farm workers. And, of course, there are many other economic and social benefits.

IN India, the provision of village access roads has been recognized as an important part of overall highway planning ever since that country's first national road development programme (the Nagpur Plan) was prepared more than a quarter of a century ago.

Very considerable improvements have been made to the road system of India, and in fact the Nagpur Plan road mileage targets were well exceeded with the completion of the First and Second Five-Year Plans. Even so, the task of creating a modern network over so vast a land area is an immense one, and there are still several hundreds of miles of missing links on the important routes.

Under India's present 20-year road development programme, 1961-81, it is planned to increase the total network by about one third, to 657,000 miles. The objective is to connect the more important villages with the nearest marketing centres, or district headquarters, in order to speed up the delivery and distribution of agricultural produce.

More precisely, the programme aims to bring every village:

- in a developed and agricultural area to within four miles of a metalled road and one-and-a-half miles of any road;
- in a semi-developed area to within eight miles of a metalled road and three miles of any road;
- in an undeveloped and uncultivated area to within twelve miles of a metalled road and five miles of any road.

Apart from the limited resources available for rural roads under the state plans, much good work has been done in this field through the Community Development Programme in India. Many thousands of miles of village roads have been constructed at very low cost by the village communities themselves.

In Turkey, where about 20 million people, or two-thirds of the total population, live in villages with partly isolated economic and social conditions, an estimated 93,000 miles of rural access roads are required to improve their living standards.

In order to complete the greatest road mileage in the shortest time with limited resources, a method has been developed for constructing the roads not for individual, but for group villages. When this long-term roads programme is completed, nearly 35,000 villages in Turkey will be linked to one another, either directly or indirectly, and to the district market centres.

Turkey's most spectacular highway project now under construction is the Bosporus Bridge, whose 1,074 metre (3,523 ft) long clear span will be the fourth longest in the world. When completed early in 1973, this wonderful bridge will provide the first direct link-up between the European road network and the developing Asian Highway System.

The Asian Highway is a vast international network of through routes for motor traffic spanning all the countries of southern Asia, except Mainland, China, between Iran in the west and Viet-Nam and Singapore in the Far East. Under the direction of the United Nations Economic Commission for Asia and the Far East (ECAFE), which launched the undertaking in 1958, great progress is being made in upgrading the designated routes to the agreed Highway standards.

In fact, the target set for the first U.N. Development Decade, 1960-70, of establishing at least one through route connecting all the countries, has been almost achieved, except notably in Burma. But it is hoped that the route through Burma, and the other few remaining gaps in south-east Asia, will become motorable in the near future.

The Asian Highway, from the mosques of Iran to the temples of Burma and Thailand, from the high plateau of Afghanistan to the great forests and mountains of Malaysia, offers thrilling prospects as one of the world's great tourist routes. But its primary purpose is to change the economic climate and raise the low living standards throughout one of the great undeveloped quarters of the world.

Certainly its economic benefits could be vast. For the Highway will help to open up barren and arid lands for irrigation and settlement. It will provide the means for low-cost transportation of the region's natural commodities like tea, rubber, rice, cotton, timber and minerals; and will facilitate the distribution of food, raw materials and manufactured goods throughout a region where hitherto the only modern long-distance transport has been in the air. Feeder roads from the Asian Highway will assist the movement of agricultural produce into areas which at present suffer serious shortages.

An international road system of a comparable scale in the Western Hemisphere is the Pan-American Highway, serving all the countries and principal cities across the length and breadth of two continents. The only break that remains in the continuous highway system between Fairbanks, Alaska, and Tierra del Fuego, in the extreme south of Patagonia, is the difficult Darien section in Panama and Colombia. Until recent years the Darien isthmus of Panama was virtually untouched and impassable, inhabited solely by Indian tribes. Now these last few hundred miles which once seemed unconquerable, will be paved and opened to traffic during the 1970s.

Speaking recently of the major economic and social benefits which will result from the completion of this final Highway section, the chief engineer of the Pan-American Highway Surveys in the region, Camilo R. Carles, said:

"The Darien region represents a very complex, wealthy potential, on which improvement has been impossible due to the lack of highway communication. Each kilometre opened by the road will mean territory available for immediate use. The Indian communities could be incorporated into the national life; agriculture and livestock could be improved; forest reservations would become available; schools, markets, health and electrification programmes would be expanded, and Panama's development would be enhanced. As a consequence of the Darien Highway, other access and feeder roads would be opened, thus contributing to the development of the farthest away places of the region."

THE special need in Africa is for roads to promote the inter-territorial trade and economic co-operation between states which is of vital importance for the future advancement and prosperity of its developing nations.

In the past, the few motor highways were built to serve the main centres within the former colonial territories, or to link raw material areas with railheads and seaports. So today the road situation throughout most of the African continent is of a very large number of unintegrated national road systems. Many African countries do not have road links with their neighbouring states.

This major aspect of road devel-

opment was among the main subjects discussed at the first Africa Highway Conference, held at Addis Ababa, Ethiopia, in October 1969. More than 500 delegates from 49 nations attended the conference, the theme of which was African unity and progress, and how good roads could provide the key to both.

But as delegates at Addis Ababa emphasized, the establishment of inter-territorial road links is only one half of the main problem of present land communications in Africa. The other half—as is the case in the rest of the developing world—is to connect market centres through an integrated system of trunk and local feeder roads so that the village communities, which comprise over 80 per cent of Africa's total population, may trade their produce and goods freely with one another in all seasons, wet or dry.

Apart from construction of new roads, there is the importance of maintaining them in good order after they have been built. Parts of the international loan funds to the developing countries are therefore usually earmarked for the improvement of national maintenance organizations with the assistance of experts from the advanced nations. Such funds are put to the local training of mechanics, drivers and operators of modern road-making plant, the purchase of maintenance equipment, the setting up of depots and workshops, and so on.

The United Nations Development Programme plays a key role in providing technical assistance for highway works in all the developing countries. In this and in other fields of modern development, the UNDP has provided opportunities for advanced training abroad to thousands of qualified people whose responsibilities call for skills they could not at present obtain in their own lands.

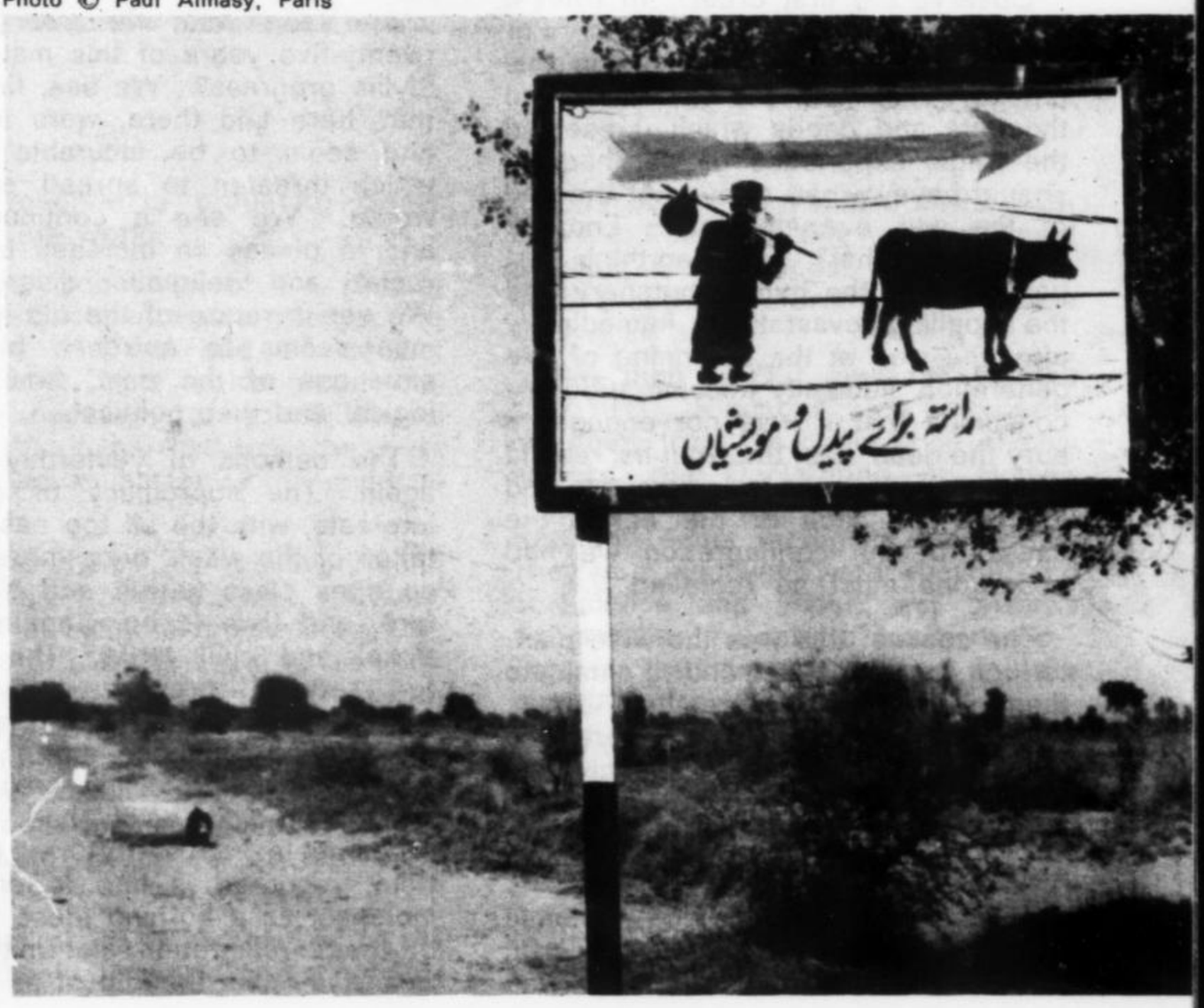
Another agency which promotes the training of young road engineers in all countries around the world is the International Road Federation, adviser to the United Nations on all road transport matters and sponsor of the African Road Conference and other important regional and world meetings of highway experts over the past twenty years.

Under the IRF Fellowship Programme young engineers from more than eighty nations—including many of the developing countries—have been able to undertake intensive one-year study courses in highway engineering at leading universities and advanced technicial institutes in the United States. Many of these highly trained men will take charge of the growing road building programmes in their own countries in the vital years that lie ahead. ■

Photo © Photo Researchers, New York

Besides the normal risks of the road, the motorist in Zambia, above, has to contend with the world's weightiest jay-walkers. The Great Asian Highway goes through the famous Khyber Pass from Afghanistan into Pakistan. Below, in south Pakistan the pedestrian, whether biped or quadruped, can walk in perfect security along his own track, safely separated from the pounding traffic of the Asian Highway, a bit of which can be seen on the extreme left of the photo.

Photo © Paul Almasy, Paris



INTERNATIONAL YEAR FOR ACTION TO COMBAT RACISM AND RACIAL DISCRIMINATION

The year 1971 has been designated International Year for Action to Combat Racism and Racial Discrimination by the General Assembly of the United Nations. Throughout its 25 years of existence, Unesco has waged a permanent war against these twin evils. During 1971, a special effort is being made to mobilize public opinion and governmental and inter-governmental bodies to take more positive action on behalf of racial equality. At Unesco's Paris headquarters a public Round Table is to be held, from March 22 to 26, on "Race and Society" at which a number of internationally famous personalities have been invited to speak. Audience participation will also be invited. One of Unesco's best sellers, "The Race Question in Modern Science", first published in 1956, is being revised and a new version in English and French, including a number of entirely new chapters, is to be published in May this year. A revised edition of the Apartheid Report, first published in 1967, is also being prepared.

In his message to the world on the occasion of the "Day of Peace", January I, 1971, major portions of which we publish below, His Holiness Pope Paul VI speaks of the growth of racial and religious discrimination and the menace it represents to world peace.

THE WILL TO PEACE

Message of His Holiness Pope Paul VI

LISTEN to Us. It is worthwhile. Yes, as usual, Our word is: peace. But it is the word of which the world is in need, urgently in need, and that makes it new.

Let us open our eyes at the dawn of this new year, let us observe two orders of general facts and events, which affect the world, its peoples, families and individuals. These facts, it seems to Us, influence our destinies deeply and directly. Each one of us can be their horoscope.

Observe the first order. In truth it is not an order, but a disorder. For the facts which We assemble in this category all indicate a return to thoughts and deeds which it seemed the tragic experience of war had, or should have, wiped away. At the end of the war everyone said: Enough! Enough of what? Of everything that gave rise to the human butchery and the appalling devastation. Immediately after the war, at the beginning of this generation, humanity became suddenly conscious that it was not enough to bury the dead, heal the wounds, rebuild what was destroyed and renew and improve the face of the earth; the causes of the conflagration we had undergone must be removed.

The causes: this was the wise plan: to look for the causes and to eliminate them. The world breathed again. Indeed it seemed that a new era was about to open, the era of universal peace. Everyone seemed ready to accept radical changes, in order to avoid new conflicts.

For the political, social and economic structures a perspective of wonderful moral and social innovations was presented. There was talk of justice, of human rights, of betterment of the weak, of orderly co-existence, of organized collaboration, of world union.

Great gestures were made: the victors, for example, came to the aid of the vanquished. Great institutions were founded. The world began to organize itself on principles of effective union and common prosperity.

The way to peace, as a normal and fundamental condition of life in the world, seemed to have been finally planned.

And yet, what do we see after twenty-five years of this material and idyllic progress? We see, first of all, that, here and there, wars still rage, and seem to be incurable plagues, which threaten to spread and grow worse. We see a continuation of, and in places an increase in, social, racial and religious discrimination. We see a return of the old mentality; man seems to entrench himself in situations of the past, first psychological and then political.

The demons of yesterday rise up again. The supremacy of economic interests, with the all too easy exploitation of the weak, once more returns; so does class hatred and class warfare, and thus is born again international and civil strife. The struggle for national prestige and political power is back; the inflexible conflict of opposing ambitions, and of the rooted and uncompromising prejudices of races and ideologies has returned; recourse is had to torture and terrorism; recourse is had to crime and violence, as a burning ideal, heedless of the conflagration that may ensue. Peace is again thought of as no more than a balance of mighty forces and of terrifying armaments. Once again people feel a tremor of fear lest some catastrophic imprudence might lead to incredible and uncontrollable holocausts.

What is happening? Where are we going? What has gone wrong? Or what has been lacking? Must we resign ourselves to doubting that man is capable of achieving a just and lasting peace, and to renouncing the task of implanting into the education of the new generations the hope for, and the mentality of, peace?

FORTUNATELY another set of ideas and facts appears before our gaze; and it is that of progressive peace. For, notwithstanding everything, peace marches on. There are breaks in continuity, there are inconsistencies and difficulties. But all the same peace marches on and is establishing itself in the world with a certain invincibility.

Every man is conscious of it: peace is necessary. It has in its favour the moral progress of humanity, which is indisputably directed towards unity. Unity and peace, when freedom unites them, are sisters.

Peace benefits from the growing favour of public opinion, which is convinced of the absurdity of war pursued for its own sake and believed to be the only and unavoidable means of settling controversies among men.

Peace avails itself of the ever closer network of human relations in the fields of culture, economics, com-

merce, sport and tourism. We must live together, and it is good to know each other, and to respect and help one another.

A fundamental cohesion is taking shape in the world. This favours peace. International relations are increasingly developing, and they form the premise and also the guarantee of a certain concord. The great international and supranational institutions are seen to be providential, at the source as well as at the perfection of humanity's peaceful coexistence.

Before this double picture, on which are superimposed phenomena contrary to the purpose closest to Our heart —that is, peace—it seems to Us that a single, ambivalent observation can be drawn. Let us ask a two-fold question, concerning two aspects of the ambiguous scene the world presents today:

— why, today, does peace recede?

— and why, today, does peace progress?

What is the element which emerges, in a negative sense, or indeed in a positive sense, from this simple analysis? The element is always man. Man abased in the first case, man upraised in the second.

Let us venture to use a word, which may itself appear ambiguous, but which, given the thought its deep significance demands, is ever splendid and supreme. The world is "love": love for man, as the highest principle of the terrestrial order. Love and peace are correlative entities.

Peace is a product of love: true love, human love. Peace supposes a certain "identity of choice": this is friendship.

If we want peace, we must recognize the necessity of building it upon foundations more substantial than the non-existence of relations (relations among men are inevitable; they grow and become necessary), or the existence of relations of self-interest (these are precarious and often deceptive), or the web of purely cultural or fortuitous relations (these can be double-edged, for peace or for combat).

True peace must be founded upon justice, upon a sense of the intangible dignity of man, upon the recognition of an abiding and happy equality between men, upon the basic principle of human brotherhood, that is, of the respect and love due to each man, because he is man. The victorious word springs forth: because he is a brother. My brother, our brother.

This consciousness of a universal human brotherhood is also happily developing in our world, at least in principle.

Whoever works to educate the rising generations in the conviction that every man is our brother, is building from the foundation the edifice of peace.

Whoever implants in public opinion the sentiment of human brotherhood without reserve is preparing better days for the world.

Photo © Look Magazine, New York

Whoever conceives of the protection of political interests without the incitement of hate and of combat amongst men as a logical and indispensable necessity of social life, is opening to human society the ever effective advancement of the common good.

Whoever helps in discovering in every man, beyond his physical, ethnic and racial characteristics, the existence of a being equal to his own, is transforming the earth from an epicentre of division, antagonism, treachery and revenge into a field of vital work for civil collaboration. Where brotherhood amongst men is at root disregarded, peace is at root destroyed..

And yet peace is the mirror of the real, authentic, modern humanity, victorious over every anachronistic self-injury. Peace is the great concept extolling love amongst men who discover that they are brothers and decide to live as such.

This then is Our message for the year 1971. It echoes, as a voice arising anew from the conscience of civil society, the Declaration of Human Rights: "All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood." This is the summit reached by the teaching of civilization.

Let us not turn back. Let us not lose the treasures of this axiomatic conquest. Rather let us all give rational and resolute attention to this formula, this goal of human progress: "Every man is my brother". This is peace, in being and in the making. And it avails for all! ■

Photo Ihrt © Stern - Black Star, New York

The cyclone that struck East Pakistan on the night of 12-13 November, last year, was one of the worst natural catastrophes of this century. Photo above, showing large ship left stranded far inland in the middle of a paddy field, and shattered village (right) give only a paltry picture of the devastation that killed an estimated half million persons. Lack of adequate communications posed a serious problem for rescue workers as food, medical aid and other equipment were rushed to the scene from around the world. "Are we going to continue, as we have done in the past to stagger from one catastrophe to another, helping to bury the dead, tend the injured, feed,clothe and house the survivors, while doing virtually nothing to prevent the recurrence of such disasters?", asks Dr. Fournier d'Albe in the article on facing page. "Or shall we mobilize our scientific, technical and economic resources in order to deal with the situation in a rational manner?"

On cyclones and other natural disasters —reflections of a geophysicist

by
E. M. Fournier d'Albe

IN 1970, Nature gave Man two severe lessons in survival.

On November 12-13, a tropical cyclone moved slowly up the Bay of Bengal to the Ganges-Brahmaputra delta. The low atmospheric pressure, the hurricane-force winds and the huge volume of water coming down the rivers at the end of the monsoon season, combined with the high tides (it was nearly full moon) to produce a surge of water which swept over many of the islands in the delta and flooded the whole coastal area to depths of as much as six metres.

In an area of 2,800 square miles, between 250,000 and 500,000 people were drowned. Some 235,000 houses were destroyed and the number of persons stricken was estimated at three million. Innumerable cattle were lost, some 600,000 tons of crops were destroyed, and over one million acres ravaged.

At 3.24 p.m. on May 31, 1970, seismic waves generated by an earthquake 55 kilometres below the sea bed off the coast of Peru began to reach the "Callejón de Huaylas", a high valley in the Peruvian Andes noted for the beauty of its scenery, and a favourite rendezvous of climbers. Within ninety seconds, more than half the buildings in Huaraz, the largest town in the valley, had collapsed into rubble, filling the narrow streets with debris and burying under their ruins more than fifteen thousand people.

But earthquakes can also shake whole mountains. While Huaraz was crumbling into dust, a great slab of rock (seven or eight million cubic metres) broke away from the west face of the giant peak of Huascarán, carrying with it about a million tons of ice from the summit glacier. It fell six hundred metres on to the glacier below and, within a minute, a huge mass of rock, water and ice was moving with gathering speed down the slopes of the mountain towards the Huaylas valley.

By the time it had reached the foot of the mountain it was travelling with such speed that it leapt over a 150 metre high ridge and buried the town of Yungay under five metres of mud. Of the 20,000 inhabitants of the town, only a few hundred escaped.

As soon as the extent of these disasters became known, there was on each occasion a spontaneous movement of solidarity throughout the world. Rescue teams, medical supplies, food, clothing and emergency housing poured into the stricken areas from dozens of countries, not only as individual gifts but also through the Red Cross and other international relief organizations.

Such was the volume and variety of this help that the governments of the countries concerned, whose resources had already been strained to the limit by the disasters themselves, had the greatest difficulty in co-

CONTINUED NEXT PAGE

E.M. FOURNIER D'ALBE *is a specialist in Unesco's Department of Environmental Sciences and is in charge of the programme in geophysics related to the prevention of natural disasters. Before joining Unesco Headquarters staff, he carried out long-term missions for Unesco in Pakistan, where he helped to set up a geophysical observatory in the earthquake-prone region of Quetta, and at the National University of Mexico.*

Photo © Associated Press, Paris

MAY DAY! MAY DAY! MAY DAY! This air photo (right) records the death of two Peruvian towns—Yungay and Ranrahirca—buried under the debris of an avalanche that rolled off the west slope of Huascaran, Peru's highest mountain, on Sunday, May 31, last year. A mass of glacial ice and rock on the mountain, shaken loose by an earthquake which rocked Peru, swept down the Huaylas Valley and with the noise and speed of an express train struck the two towns. Some 80 million cubic metres of water, mud and rocks buried the towns. killing over 20,000 persons. "Aqui Estuvo Yungay" (This is where Yungay stood) says the inscription (top of photo) and a cross marks the site of the Central Square (Plaza de Armas). Burial place of Ranrahirca is similarly marked (bottom of photo). Dotted line at centre shows where a highway formerly linked the two towns. Below, some survivors of the Peruvian earthquake, to whom emergency supplies and equipment were airlifted.

Photo UNICEF, New York

ordinating and channelling this aid into the areas where it was most urgently needed. As had so often happened in similar circumstances in the past, a great deal of effort and generosity was, in fact, partly wasted through confusion.

The question before us is very clear: are we going to continue, as we have done in the past, to stagger from one catastrophe to another, helping to bury the dead, tend the injured, feed, clothe and house the survivors, while doing virtually nothing to prevent the recurrence of such disasters? Or shall we mobilize our scientific, technical and economic resources in order to deal with the situation in a rational manner?

If the latter is our choice, our first task must be to comprehend the natural phenomena which are responsible for these disasters, so that we may forecast with accuracy when and where they will strike and what will be their magnitude.

This is already being done with some success in the case of wind storms and floods; it may well be possible to do so, in the future, for volcanic eruptions, provided that the necessary resources are devoted to establishing proper instrumental surveillance of active and dormant volcanoes.

It is perfectly feasible, when sufficient data are available, to predict *where* destructive avalanches, earthquakes or landslides are likely to occur, and it may be that further intensive research will provide us with the means of forecasting *when* they will happen.

The most striking progress in all these branches of scientific research has been made, as one might expect, in the advanced countries. But there are still vast areas of the world where the means necessary for the surveillance and study of the natural phenomena are sadly lacking, and here there is an urgent need for more effective international co-operation and assistance.

Our second task must be to devise and develop means of protection against the violence of nature. We already know, in theory, how to build wind and earthquake-resistant houses, how to control floods in rivers and how to reduce the risks of avalanches and landslides; but only in very few parts of the world is such knowledge systematically applied.

This is partly a problem of economic resources: flood control, for instance, often entails large and expensive public works. But it is often a problem of education: rules and regulations can be drafted for the design and construction of wind and earthquake-resistant buildings, but these rules will remain ineffective unless the engineers, architects and builders fully understand them and recognize the need to apply them diligently in practice.

Here again, there is a tremendous need for more effective international co-operation, especially so that the resources of the great research centres can be brought to bear on the problems faced by the developing countries, problems which are imposed on them by their limited economic resources.

Our third task must be to integrate these scientific and technical elements into the overall plans for dealing with disaster situations. Considerable efforts are being made, both by the United Nations and by the League of Red Cross Societies, to assist govern-

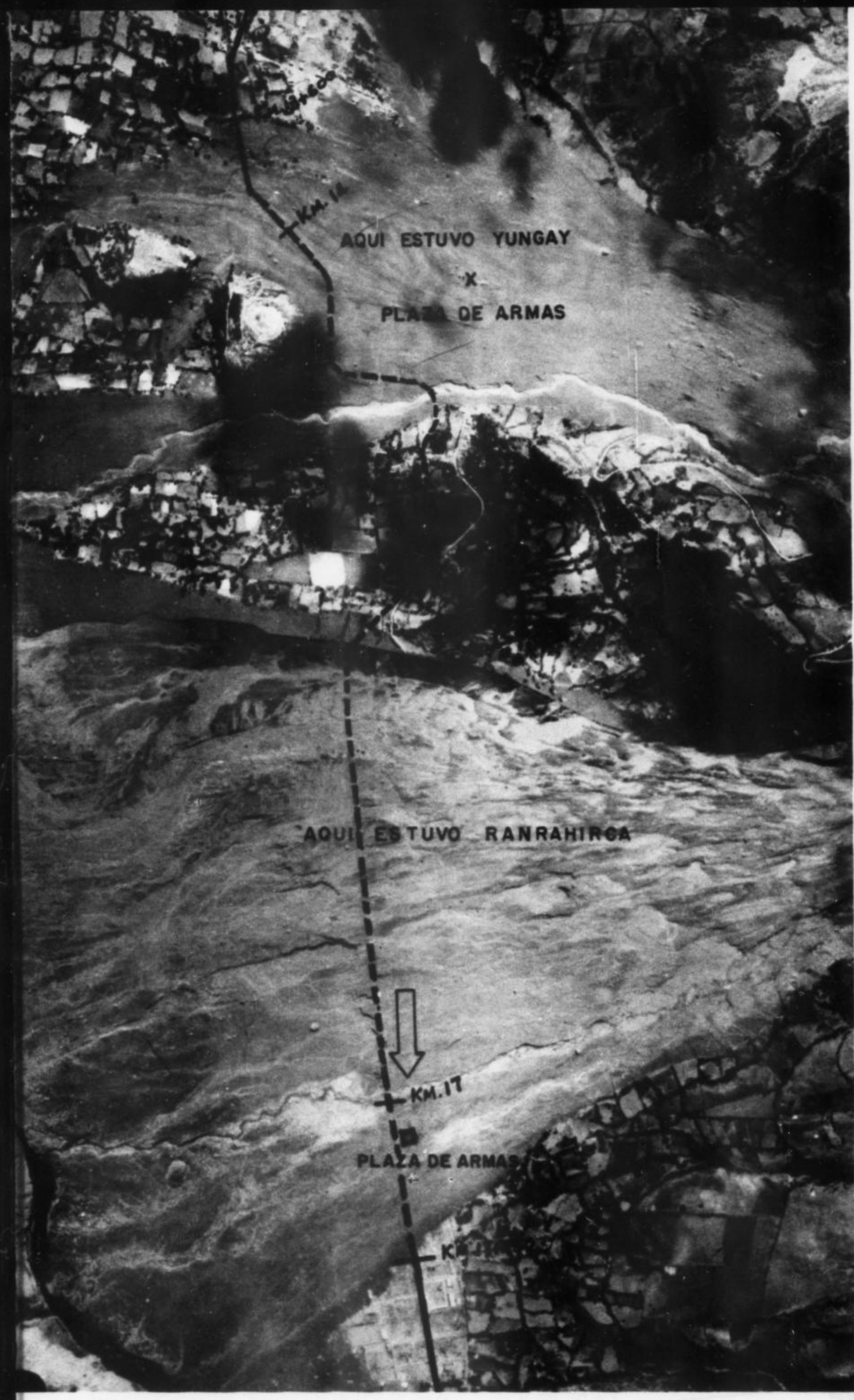


Photo © Oficina Nacional de Información, Peru

ments in preparing national plans. However, there are still great variations from country to country in the degree of preparedness for coping with natural disasters.

Even in countries where detailed plans have been made, one often finds that these are concerned solely with *post facto* rescue and relief; relatively little attention is given to the improvement of forecasting and warning systems or to the development of more effective means of protection, based on a better knowledge of the natural phenomena concerned.

One particular aspect of such planning needs to be emphasized. When a disaster has occurred, medical and rescue teams are normally on the spot within a few hours, and they are swiftly followed by emergency supplies of food and clothing. However, it often happens that in the few hours or days immediately following a catastrophe, the local authorities have to make urgent decisions on re-housing and the re-establishment of public services.

These decisions may have far-reaching consequences for the subsequent reconstruction and rehabilitation of the affected area, but they nevertheless have often to be made under conditions of extreme stress. It has therefore been suggested that emergency aid should include not only rescue and relief teams but also small technical units to help in the organization both of immediate relief and long-term rehabilitation.

The three tasks defined above were presented in a certain logical order, but of course work may proceed on all three simultaneously. There is no doubt that their fulfilment would be rendered easier if there were a greater degree of co-operation and a greater exchange of ideas and information between different countries, between international organizations both within and outside the United Nations system, and between the various professions concerned.

At the beginning of this article, we remarked on how natural disasters never fail to stir the spirit of human solidarity, and on the generous aid which is always forthcoming on these occasions. Yet we must surely ask ourselves, in this latter half of the twentieth century, whether more effective means cannot be found to help those countries and communities which have to bear the heavy economic burden of reconstruction after such events.

Is it not possible to imagine some global system of insurance against natural disasters? This question has often been debated and was studied in some depth by the International Relief Union during the years of its active existence. The principal difficulty resides, of course, in the magnitude and the uncertainty of the risks involved.

However, with our steadily increasing knowledge of the natural phenomena and the recent rapid progress in mathematical techniques for handling statistical problems of this kind, we may perhaps soon be able to define the bases on which viable insurance schemes may be established. This is certainly a problem which would repay intensive study by scientists, mathematicians and insurance specialists,. working in close co-operation with each other.

And so the lesson to be learnt from the events of 1970 is quite clear. Science and technology offer us the means of foreseeing the violent paroxysms of nature and of protecting ourselves against them. Disasters of the kind that happened last year can be prevented in the future if, by a concerted effort, we bring the scientific technical and economic resources of the world to bear on this problem. ■

Latent talent —the anagram a parent can solve

The famous French writer, Georges Duhamel, who was also a medical doctor, once wrote that "up to the age of five, every child is a genius". It is now increasingly recognized that pre-school and even pre-kindergarten youngsters have an untapped capacity for learning and this capacity could be exploited far more than it is under many current teaching practices. Hence the growing importance attached by educators and psychologists to the idea that everything should be done to stimulate the child's natural curiosity (photo below) and to encourage the rapid broadening of his knowledge (photo opposite).

Photo © G. Bern, Paris

Photo © Look Magazine, New York

by Boris Nikitin

WHY do some persons have aptitudes that others lack. Why are some talented and others not gifted in any way? Why doesn't every child prodigy become a genius? And why, in general, are geniuses so rare in all spheres of human activity? Human ability is a subject that has always aroused the keenest interest.

The unprecedented acceleration of scientific and technological progress, the growing avalanche of knowledge about the world we live in and the need to acquire this knowledge confront educators and psychologists with a multitude of problems.

Giving students more knowledge means either increasing the number of years they must study or adding new material to school programmes. Yet high school students already have a longer working day than adult workers —a load that endangers their health.

BORIS NIKITIN *of the U.S.S.R. was trained as a mechanical engineer, but has studied and written widely on the problems of development in early childhood. He and his wife Yelena, who is a teacher, have now six children, and are co-authors of a book entitled "Are We Right?" based on their own experiences and theories on raising and educating children. Boris Nikitin's most recent book on these questions published in the U.S.S.R. is "Hypothesis on the Emergence of Creative Abilities".*

Moreover, the "life span"of knowledge is growing shorter all the time. Knowledge is aging faster and faster and must be constantly "renewed." One after another, trades and professions are becoming extinct and are being replaced by new ones. In almost all occupations mental and creative activity has a tendency to grow, and to grow at an accelerated pace. Consequently, development of creative faculties and intellect is a paramount task in education. Society wants to know where genius comes from.

All sorts of assumptions have been put forward over the centuries. Since many geniuses and talented men and women were known to have had larger brains than the average person, it was believed that ability depended on the amount of grey matter. But there have also been geniuses who had small heads or who lost the use of part of their brain.

After the great French chemist Louis Pasteur suffered a cerebral haemorrhage in 1868, only one hemisphere of his brain functioned and he was partially paralyzed. But he continued his experiments and made some of his greatest discoveries during the next twenty years.

Special studies have been made of the structure of the brain cells, especially the cells of the cortex. These have shown that the cells of geniuses sometimes differ from the usual cell structure, but which differences are decisive has remained a mystery.

It was once assumed that the first born child in a family was talented. The hypothesis found supporters until statistics disproved it. Out of 73 world-famous geniuses and talented persons, only four were first-born children. Milton, Leonardo da Vinci, Heine, Anton Rubinstein, Benjamin Franklin and Mendeleyev were each the 17th child in the family, while Ilya Mechnikov, the Russian biologist was a 16th child.

The belief that ability is inherited has proved to be extremely tenacious. Yet geneticists who have made major discoveries in the sphere of heredity in recent years are far from unanimous in their opinions on this question.

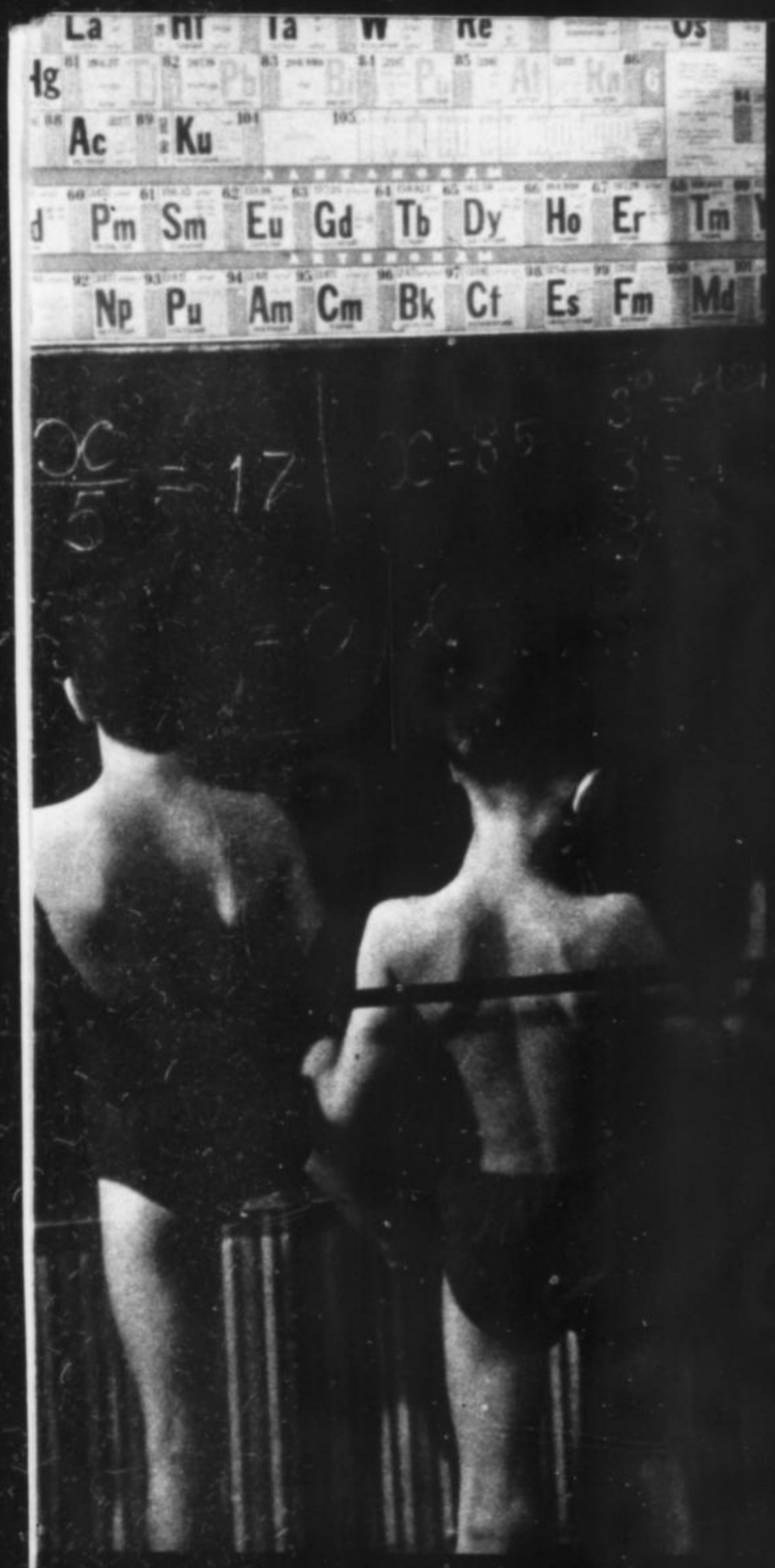
How can we explain the following facts? Small children often amaze adults with early displays of creative ability. But as they grow older they do not develop into geniuses or even talented men and women. Where did their precocious abilities and faculties vanish to? Why do the overwhelming majority of the children reared in orphanages and children's homes develop speech habits so slowly and do so poorly at school?

In searching for answers to these questions let us consider the nature of what we call "faculties."

Science knows of several dozen instances where small children have lived or grown up in the wilds among wolves, bears or apes and have been returned to human society between the ages of eight and twelve. Naturally, attempts have been made to teach

CONTINUED PAGE 31

XUM



Photos © APN

XUM

CATCH 'EM YOUNG

Learning to read at the age of three is no mean feat, but for the children of Soviet educationalist Boris Nikitin it was the most natural thing in the world. Mathematics too held no terrors for them. Acting on the "catch 'em young" principle, Nikitin gave them cards and blocks, on which letters and numbers were printed, to play with at the age of one. Physical development was not neglected and the Nikitin children are always ready for a barefoot romp in the snow with father.

them to speak, but not a single one of these children has ever learned to speak normally. A girl named Kamala, found in a wolves' den near Calcutta at the age of eight, learned to pronounce only 30 words in the six years she lived with the family of a minister.

From this we can conclude that learning to speak is not something that can be done at any age. Under certain conditions the potential develops into faculty and children begin to speak quite easily. Under other conditions, the process is impeded and progress is slow, while in other cases it stops almost completely.

Every physically and mentally healthy child possesses tremendous potentialities for the development of his or her creative faculties from the moment of birth. In my view, the earlier we start to develop these faculties the better. Yet we neglect and discount the period in a child's life that is most important for the development of creative faculties.

Let me give you an example from my own experience in raising five children. Our family experiment, if one may call it that, began before the hypothesis of creative faculties assumed the form I am describing now. Our project and the ways we planned to carry it out were extremely simple. The only surprising aspect was the result we obtained.

Like many other parents, my wife and I wanted our children to be well developed both physically and mentally. Yet we had our doubts about many educational and medical precepts, particularly those concerning the period when mental development begins. We even doubted whether these principles had a valid scientific basis.

We decided to enlarge the child's world to the extent that the resources of a family of schoolteachers allowed, and to fill it with all the things that make up our "adult" world—real objects, tools, materials, instruments, books and so on—and provide ample opportunities for human contacts.

The tools were small, but they were real tools to be used on a work-bench. The penknives were sharp and so were the hatchets. Things could really be weighed on the scales, and gymnastic exercises performed on the rings, horizontal bars and climbing ropes.

Even the toys were not just toys. Big wooden blocks and boards could be used to build a house large enough to crawl into. The house could be wired for electricity, through a low-voltage transformer. Toy machines and models were to be built by following real blueprints. The walls of the children's rooms were hung with maps, charts, diagrams and the letters of the alphabet. On the shelves we put building sets, reference books and textbooks.

In this small but real world we gave the children complete freedom to act as they chose. We did away with a great number of pedagogical rules and restrictions, and watched to see what would happen.

We did not then know how soon a child is capable of learning to read. At the age of one, the eldest boy was already playing with letters printed on cardboard and on blocks. We provided him with a blackboard and chalk, with paper and pencils, with letters made out of plastic and wire, with ABC books and first-grade readers.

The result took us completely by surprise. We discovered that children can learn to read very early. Alyosha, the eldest, read his first word at the age of two years and eight months, Anton at the age of three years and three months, Anna and Olga at the age of three years and four months.

By the time they were three and a half years old, they knew as much arithmetic as a child in his first year at school (Soviet primary education begins at the age of seven.) The ability to read led to an interest in maps, books and even textbooks. The children easily picked up information about grammar and arithmetic from textbooks and from conversations at the dinner table, and even set Father and Mother problems in division. By the age of six they could draw a plan of a route, read maps, and find their bearings in the fields and forests and in the town.

When Alyosha was five he walked daily to the infant-feeding centre, one and a half kilometres away, to fetch food for his baby sisters. He was seven and a half when he made his first trip on the suburban train from Bolshevo to Moscow (about 60 km.) and we were not afraid to let him go alone. Two years before the boys went to school they could read figures up to one million and do simple fractions, and easily handled measurements in length, weight and time.

Alyosha completed three years of schooling in one year. At a mathematics' contest held in the third year of school he won first place. Anton entered school one year later but quickly caught up with his brother. He is now nine years old but feels at ease among thirteen year-olds and has overtaken his elder brother by coming first in the last maths contest.

The girls are evidently going to move ahead equally fast in elementary school. Learning to read early, we

CONTINUED NEXT PAGE

have discovered, makes it easier to write correctly. Both boys wrote without grammatical mistakes in their very first year at school.

I have given the boys psychological tests in combining, elucidating natural connexions, and classifying. They did as well as children of fifteen.

Children of pre-school age have great opportunities to solve vital new problems. They have plenty of free time to do this. That is why there is often an early flowering of their creative abilities. But as they grow older, curiously enough the number of complicated problems they face decreases. At school whatever is new and incomprehensible is explained to them. Besides, as the children move from grade to grade at school they have less and less time to devote to what interests them. All this is bound not only to check but also to extinguish creative abilities that have flowered so vividly.

At kindergarten where children stay throughout the week, going home only at the weekend, careful supervision and a strict daily regime are of the utmost importance. The child there is not forced to solve anything for himself. He is isolated from older children. Conditions for speech development are unsatisfactory since he has contacts with only a few adults, and learns nothing from other children of the same age.

If mathematical ability depended on "nature," all schools would produce equally capable mathematicians. But they do not, and so we have "special" schools with "special" teachers and "special" methods of teaching maths. This creates conditions favourable to the development of aptitudes in mathematics which other schools do not have.

No matter what faculties we consider, we find everywhere that the older the group of children the fewer the number of capable children. And on the contrary, the younger the group, the larger the number of capable children.

The Swedish neurobiologist, Holger Hiden, confirms this in biological terms. He states that experiments conducted at a "molecular level" show that for full development the brain needs not only physical nourishment but also stimulation, especially in early childhood.

Neurons deprived of either of these factors—and especially a stimulating "study" environment—cannot produce albumin or form a sufficiently developed network of fibrous links. Figuratively speaking, they become empty sacks, and finally atrophy. New research may lead to big changes in education. There is already a movement in support of starting formal education in the first year of life.

At the General Assembly of the World Organization for Early Childhood Education, Prof. René Zazzo of France summed up a great deal of recent research when he said: "Observations show more and more that the first years of life are extremely significant. These first years are filled with unsuspected riches." And he added: "The point of equilibrium between birth and adulthood is the age of three years." From their calculations, the American educator, Robert L. Thorndike and his associates have come to the same conclusion. By the age of three, they say, a human being has covered half of his mental development. ■

TV's CHALLENGE OF THE 70s

(Continued from page 11)

man. The huge quantity of material it produces, the vast number of human beings on which it has to draw do give it the character of genuine folk art—based on the demands of the mass rather than on the tastes of a few élitist figures.

The negative aspect of the above situation follows from the fact that while there is a true analogy with the primitive man in his tribe and his village, modern man is not a primitive and his world is a village only in the electronic, not in the literal sense. Clearly the possibilities of mass manipulation through television—commercial manipulation in some free-enterprise societies, political manipulation in collectivist countries—are truly frightening.

It seems to me, however, that the very quantity of television carries its own built-in safety valve. Television commercials may be effective sales devices, yet in the long run surely they must immunize their audience. The time will come when the law of diminishing returns sets in.

The very quantity of the material poured out to the electronic village must, over the generations, the decades, the centuries, produce a highly critical and sophisticated tribe, a community hardened and immunized against both the overt and the hidden manipulators. And such resistance to manipulation and criticism is also, I believe, the immediate task of those aware and informed enough to be able to think in the long term.

Criticism and judicious evaluation of material offered on the mass media must surely become one of the principal subjects treated in the education of future citizens in any truly democratic community. Since anyone who is familiar with the technical problems and procedures behind the scenes of the medium develops a trained eye to detect the concealed manipulation, surely generations of children who have grown up with television and become familiar with its techniques will no longer be as credulous and as naïve as their elders who first encountered it as a new toy when they were already adults.

They will certainly develop their own almost automatic evaluation of the different kinds of material offered to them, will become able to distinguish between the real and the manufactured event, between the genuine and the synthetic personality, between the true work of art and the spurious hack product.

Television may have reduced our culture to the status of the primitive tribe, but that tribe will soon comprise the whole of humanity, without distinction of race, creed or social class. That tribe will then, if external circumstances remain favourable, have vast opportunities for development—development towards mass sophistication, mass wisdom, and a genuine mass culture. These opportunities are made available, for the first time in history, by an electronic communications medium which is able to bring the whole of human wisdom to every human being.

In the long term, perhaps quantity will have become the foundation of a great leap forward in the overall quality of human culture and through it of human life itself. ■

BOOKSHELF

RECENT UNESCO BOOKS

■ **Unesco Statistical Yearbook 1969**

Population, Education, Television, Film and cinema, Science and technology. Radio broadcasting, Newspapers. Libraries and museums, Cultural expenditure etc.

Bilingual : English-French

1970 ($26.00, £7.80)

See article page 14

■ **Better Teachers**

An experiment with in-service teacher training conducted by the UNRWA/ Unesco Institute of Education

1970 ($3.50, £1.05).

■ **The Education and Advancement of Women**

by Jacqueline Chabaud

1970 ($2.00, 60 p).

■ **Annual Summary of Information on Natural Disasters, No 3 : 1968**

1970 ($2.50, 75 p).

■ **New Trends in Mathematics Teaching Vol. II (1970)**

Prepared by the International Commission of Mathematical Instruction

Composite : English-French

1970 ($7.00, £2.10).

■ **Functional Literacy Why and How**

(Unesco and its Programme)

1970.

■ **Main Trends of Research in the Social and Human Sciences Part I : Social Sciences**

Foreword by René Maheu

Co-edition Unesco-Mouton, The Hague, 1970 (Cloth: $30.00, £9).

■ **What is Educational Planning?**
by P.H. Coombs

Unesco-International Institute of Educational Planning

1970 ($2.00, 60 p).

■ **Students as Links Between Cultures**

Co-edition Unesco-Universitetsforlaget, Oslo

1970 ($10.00, £3).

■ **National Science Policy and Organization of Research in the Philippines**

(No. 22 of Science Policy Studies and Documents)

1970 ($2.50, £0.75).

UNESCO NEWSROOM

The 5,000-year-old history of Korea

The first complete history of Korea written in English has now been published. A 300-page volume written by leading Korean scholars and produced with Unesco's help, it is designed to promote a better understanding and appreciation in other countries of Korea's 5,000-year-old historical and cultural heritage.

Birth of an art museum

Work is going ahead on a hilltop site in the centre of Karachi (Pakistan) on an art library planned as the nucleus of a museum of modern art. The project has been launched by Pakistani artists and supporters of artistic and cultural activities as a co-operative and self-paying venture, run by a non-profit foundation.

Tracking down the guilty six

The six most common air pollutants—sulphur dioxide, dust and other particles, carbon monoxide, oxidants, nitrogen oxides and lead—are to be studied by the World Health Organization with the aim of setting criteria and guide lines for air quality. Data gathered by WHO's international network of centres and laboratories for monitoring air pollution will be used to pinpoint the most polluted areas and to find out at what level health is endangered.

Science for the blind

"Science for the Blind", a non-profit organization in the U.S.A. provides recorded scientific information and develops technical work aids for visually handicapped scientists, technicians, hobbyists and laymen. Taped periodicals which keep blind scientists up to date with the latest trends, total 24,000 a year and serve close to 1,000 persons in the U.S.A. and Canada. "Science for the Blind" operates from 221 Rock Hill Road, Bala-Cunwyd Pennsylvania 19004, U.S.A.

Bubble barrier against pollution

A "bubble barrier" is used in Antwerp harbour to prevent the spread of oil spillage from Belgium's largest refinery. The system, designed by a Swedish firm, consists of a perforated hose laid on the harbour bed. When compressed air is pumped into the pipe, bubbles rising to the surface form a barrier of turbulence effective against even very thick layers of oil. Bubble barriers have the twin advantage of being in place before pollution occurs and of allowing sea-going traffic to pass unhindered through a polluted area.

An ecology reserve barred to man

In a 120 square mile expanse of desert and low uplands, near Richland, Oregon, U.S. ecologists are studying wildlife in a "pure balance of nature" unaffected by disruptions caused by man. The "Arid Lands Ecology Reserve" is semi-arid and populated mainly by coyotes, deer, rabbits, snakes, mice, darkling beetles, hawks and owls. It forms part of a security zone round plutonium factories and has been virtually barred to humans for nearly twenty years.

'Literacy Discussion'

A new quarterly bulletin dealing with problems of literacy, the "Literacy Discussion", has been launched by the International Institute for Adult Literacy Methods in Teheran (Iran). The Institute was established jointly by Unesco and the Government of Iran to provide documentation, research and training services on methods, media, materials and techniques for adult literacy. "Literacy discussion" is published in English and French. Its "Summer 1970" issue was specially devoted to literacy research. Copies can be obtained free of charge by writing to the Institute, c/o Box 1555, Teheran, Iran.

Training in analytical chemistry

A nine month international postgraduate training course in Analytical Chemistry, sponsored by Unesco and organized by the Charles University, Prague, begins on October 1, 1971. The programme covers a wide field, including the application of modern analytical methods to problems of special importance to developing countries. Application forms are obtainable from the Training Course Office, Charles University, Albertov 2030, Prague 2, Czechoslovakia; closing date for applications April 1, 1971.

Fewer women die in childbirth

A striking drop in maternal death rates is shown by a WHO study of statistics covering 36 countries during 15 years. Sweden is the safest place in the world to have a baby. Its maternal death rate dropped from 69 per 100,000 births in 1951 to 11.3 per 100,000 in 1966. Some countries have halved their maternal deaths during the same period.

Flashes...

■ *Reconstruction of the cyclone-devastated areas of East Pakistan will cost $185 million, according to World Bank officials who have drawn up a comprehensive plan for this operation.*

■ *International youth centres are to be built by the Nigerian Youth Council in each of the 12 States of the Nigerian Federation, the first near Lake Chad.*

■ *Canada has become the first country in the world to have an entirely automated meteorological network with stations linked to a central computer in Toronto.*

■ *A special travel service to aid foreign students visiting Indonesia has been set up by the Student Council of the University of Indonesia in Djakarta.*

Letters to the Editor

PRINCESS OF KERKOUAN

Sir,

I have much pleasure in sending you a photograph of the statue of a woman, carved in wood, which was recently discovered at the site of the Punic city of Kerkouan at Cap Bon, Tunisia. The statue has provisionally been named "The Princess of Kerkouan".

This is a discovery of outstanding importance and I am sure the photograph of this "goddess" deserves a place in your much admired magazine.

I enclose a short text by Prof. Mhamed Fantar of the University of Tunis, describing the discovery of the statue during the archaeological Seminar held at Kerkouan, and indicating the archaeological importance of the find.

Rafik Said
Minister Plenipotentiary, Permanent Delegation of Tunisia to Unesco.

Photo © National Institute of Archaeology and the Arts. Tunis

Mhamed Fantar, a Tunisian specialist in Punic archaeology and epigraphy, is the author of "Carthage Through the Eyes of Greece and Rome", published in our special number on Unesco's programme for the safeguard and development of monuments and sites in the Carthage-Tunis Region (December 1970). Secretary-General of the Archaeological and Historical Research Commission of the National Institute of Archaeology and the Arts, in Tunis, he has written many studies on archaeological discoveries in Tunisia. On the important discovery of the "Princess of Kerkouan" (photo above), Prof. Fantar writes:

"At the end of the 1970 university year, the Archaeological and Historical Research Centre of Tunisia held its annual Seminar for archaeologists at the site of the Punic city of Kerkouan at Cap Bon, between Kelibia and el-Haouaria, in Tunisia. The Seminar, which was attended by archaeologists from Africa, Asia and Europe, lasted for two rewarding weeks.

"Among other activities, three tombs were examined with the aim of acquiring a better knowledge of the Punic burial ground at Kerkouan.

"In one of the three tombs investigated the archaeologists were astonished to find the statue of a woman sculpted in wood and forming the lid of a sarcophagus.

"This find will undoubtedly arouse world-wide interest among archaeologists. It brings to light certain aspects of Punic religion about which little is known. Perhaps we have uncovered the statue of a goddess. Furthermore, the Kerkouan statue opens up for us a new field of Carthaginian art—sculpture in wood. In addition to the artistic aspects of sculpture, the "Princess of Kerkouan" will reveal to us the technical aspect of wood sculpture.

"The tomb in which the statue was found was sealed again immediately after examination in order to avoid a sudden change in the ambient atmosphere. The wood of the statue has suffered greatly from humidity and it was essential to maintain the microclimate that had existed in the tomb for some 2,300 years. International collaboration will be necessary to ensure the preservation of this masterpiece of the world's cultural heritage."

FOR THE SICK AND LONELY

Sir,

For the past five years, my wife and I and a few friends have been helping over 1,000 sick and lonely people by giving them books, magazines and newspapers that we have collected. Appeals have been made on our behalf over the radio with excellent results. But the winter is here and we are once again short of reading material to distribute.

Would you say something about our work, not necessarily only in the French edition. Above all I should like people to know about our work which might perhaps serve as a small example of what can be done to help the sick and elderly.

Jacques Maréchal
B. P. 129, Saint-Dizier
Haute-Marne, France

MAN VS NATURE

Sir,

I was most impressed by the article, "Man—Killer of Nature", in your August-September, 1970 issue.

Pollution is a problem of the utmost importance, but, unfortunately, such means as exist for fighting it are slow-moving and often ineffective.

Public opinion remains unmoved by this problem, but I trust that this article, which was of great moral weight and value, will have a positive effect on those who read it.

We can never have too much information about problems of this kind.

Simone Aviron-Violet
Lyon, France

THE PERILS OF INHALING

Sir,

The correspondence about cancer and the inhaling of tobacco smoke (Letters to the Editor, Aug-Sept, 1970, issue), leads me to ask is it definitely proved that a form of lung cancer results *only* from inhaling? I have been smoking for 60 years but have never inhaled and at the age of 86 my heart and lungs are sound, as is proved by my continued employment in government service.

If *only* inhaling can result in cancer, why is not this fact definitely stated in medical treatises on this subject? It seems to me that no smoke in lungs implies no impairment of lungs.

This seems to be such an important facet of the subject and for research that one can only be amazed at its apparent neglect. What about a slogan "No inhalation, no lung cancer"?

Colonel E. A. Loftus
Lusaka, Zambia

BRITTANY OR NORMANDY?

Sir,

In your issue devoted to Cancer (May 1970), Nedd Willard, writing of "hidden factors in the geography of cancer", mentions the hypothesis which sees a link between the high rate of cancer of the oesophagus (the human gullet) in Brittany and the large quantities of calvados (spirit distilled from cider) drunk in that region of France.

As far as I know, the Bretons drink less cider spirit than their neighbours in Normandy. It is above all the people of Auge district in Calvados (Normandy) who "chase" their coffee with a calvados or drink it after a meal.

Charles Collard
Antwerp, Belgium

'IMPOTENT IDEALISTS'

Sir,

In a letter published in your October 1970 number, I wrote: "One aspect of youth which is often sneered at is their idealism" and "youth often seems to be faced with a choice: either you can remain an impotent idealist or you can carry out the measures which we (governments) desire."

Since I wrote that letter, I have joined the Cambridge University United Nations Association, and thus I am not quite so convinced of the "impotent idealist" position. I wonder whether my address could be supplied to anyone who feels strongly about what I said. I would thus not only become acquainted with a much wider range of opinion (which I am anxious to do) but might also be able to clarify my position.

M. L. Meakin
1 St. Peter's Terrace
Cambridge, U.K.

THE PROBLEMS OF AGING

Sir,

May I suggest that the "Unesco Courier" devote a forthcoming issue to the problems of age and the aged in the world? Articles could deal with the physiological and psychological aspects of old age as well as its demographic and sociological implications.

M. Durry
Paris, France

In "Science vs Old Age", the "Unesco Courier" devoted the major part of its October, 1958 issue to the problems of aging—Editor.

Imp. GEORGES LANG, PARIS. IMPRIMÉ EN FRANCE. — Dépôt légal. 1er trimestre 1971 - C 1

unesco

statistical yearbook / annuaire statistique 1969

Population
Education
Science and technology
Libraries and museums
Book production
Newspapers and other periodicals
Paper consumption
Film and cinema
Radio broadcasting
Television
Cultural expenditure

Population
Éducation
Science et technologie
Bibliothèques et musées
Édition de livres
Journaux et autres périodiques
Consommation de papier
Film et cinéma
Radiodiffusion
Télévision
Dépenses afférentes à la culture

666 pages - Bilingual: English-French
Cloth: $33 - Paperback: $26

Just published

UNESCO STATISTICAL YEARBOOK 1969

(7th issue)

An indispensable reference book of vital statistics from over 200 countries on:

- Population
- Education
- Television
- Film and cinema
- Science and technology
- Radio broadcasting
- Newspapers and periodicals
- Libraries and museums
- Cultural expenditure
- Book production, etc.

SEE ARTICLE PAGE 14

Prepared with the co-operation of National Commissions for Unesco and national statistical services, and with the help of the Statistical Office and the Population Division of the United Nations.

UNESCO STUDIES ON TELEVISION

- When does television affect a child's ideas and values?
- How does violence on TV affect children?
- What should be the aims of television education?
- How can TV best serve adult education?

These are some of the important questions discussed in the following studies on television published by Unesco

● **Adult education and television**
Edited and introduced by Brian Groombridge
143 pp., 1966, $4.50

Three studies in Unesco's "Reports and Papers on Mass Communications" series:

● **The effects of television on children and adolescents**
An annotated bibliography
Edited by Wilbur Schramm
54 pp., 1964, 2nd imp. 1969, $0.75

● **Screen education. Teaching a critical approach to cinema and television**
By A. W. Hodgkinson
99 pp., 1964, 2nd imp. 1969, $1.50

● **Social education through television**
An All-India Radio/Unesco pilot project
44 pp., 1963, 2nd imp. 1968, $0.50

Order from:

UNIPUB. INC. (UNESCO PUBLICATIONS CENTER) P.O. BOX 433, NEW YORK, N.Y. 10016

1971
International Year for Action to Combat Racism and Racial Discrimination

(see page 22)

Photo A. Perlstein - © L'Express, Paris

XUM

XUM